

SOME BEAKER DOMESTIC SITES IN WEST NORFOLK
AND THEIR AFFINITIES

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INTRODUCTION

The beaker cultures are known wherever they occur chiefly through the artefacts which were customarily buried with the dead, either below barrows or in flat graves. Domestic occupation sites are rarely found, and material from them forms only a small proportion of the total available. Moreover, the individual sites have usually been very sketchily recorded, and even where this is not so, the evidence they have yielded of the life of the people concerned has been largely negative. It is hardly surprising, therefore, that this aspect of the Beaker culture has usually been dismissed in a few brief lines, and that no systematic study of Beaker domestic sites has yet been published.

Quite a large number of the known sites have been published individually, but their significance tends always to be overshadowed by that of sites more obviously rewarding to the excavator, such as graves, or the 'henge' monuments. Many, indeed, were discoveries incidental to the excavation of such sites as neolithic 'causewayed camps' or bronze age barrows. For this, or whatever other reason, excavation of the domestic sites has tended to be piecemeal, or on a small scale, and the results, therefore, inconclusive. Pits, hearths and occasional traces of light structures are found, but so little in all that assumptions of the kind made by Rainbird Clarke about the Long Necked Beaker culture in East Anglia have been common:

'These people were nomadic herdsmen, who supplemented their food supply by fishing and fowling and a little cultivation. Since they had no fixed abodes, they lived in tents which could be easily transported.'

(Clarke R.R., 1960. 65)

The traces of purely domestic sites of British neolithic culture in general are scarcely more informative than or different from those of the Beaker culture, but Isobel Smith, writing of these, is more guarded in her conclusions:

'It is becoming increasingly evident that, for most of Lowland Britain, the only traces of Neolithic settlements that are likely to be discovered, apart from surface scatters of artefacts, will be pits.... It must be concluded that in this area houses were as a rule constructed in such a way as to leave no permanent or recognizable traces in the ground.'

(Smith I.F. in Field et al. 1964. 367)

Such statements are based on a general knowledge of known sites and a particular knowledge of some. A detailed survey of a large number of known sites, published and unpublished, and the finds from them, would enable a more up to date and definitive assessment. The problems which beset such a survey have already been outlined, and the limitations of any conclusions reached must be equally apparent. While excavations are small in scale and few in number the possibility remains, however slight, that the point and focus of the sites may have been missed, and there is some evidence, in Britain and on the Continent, to justify this doubt.

The potential and value of such a survey is still great, however. Much may sometimes be deduced from the objects found in graves concerning the social structure, customs and material culture of the people who made and used the artefacts and who placed them in the graves, but the inherent bias and the lacunae in such a view of a culture are obvious. The objects thus placed were selected, and all kinds of factors could have governed their selection. It is therefore of the greatest

importance that all available information about domestic and non-funerary sites of the same culture, however little this may seem, should be examined, in order that any such bias may be detected and a more complete concept of the culture formed. In addition, assemblages of material, especially pottery, from domestic sites have a particular value above that of funerary assemblages in any typological study, as Clarke has been careful to point out, precisely in that they are larger and non-selective.

The discovery of a particularly productive site, or series of sites, at Hockwold-cum-Wilton, in west Norfolk, has prompted this attempt to review the whole subject of Beaker domestic sites in Britain, and various topics and side-issues which arise from it.

Scope of Thesis

The purpose of this thesis is to correlate as much of the available information concerning British Beaker domestic sites as is practicable, with the object of clarifying and, it is hoped, further contributing to understanding of this important aspect of the Beaker culture.

The starting point of this study is the group of Beaker sites at Hockwold-cum-Wilton, which form a large and unpublished source of material and information, and these are described and discussed first of all and separately. The Hockwold sites are then seen in relation to other, similar sites, published and unpublished, in East Anglia as a whole, not so much because these are representative of the British Isles, for if they are, it is only in a limited sense, but because the region is distinct geographically, and in it there are a sufficiently large number of sites known to make a detailed comparative study meaningful. Finally, Beaker domestic sites throughout the British Isles as a whole are discussed in the light of the findings of this more limited survey. This last section is chiefly concerned with published sites, since shortage of time prohibited further investigation.

Beaker domestic sites may be considered from two different angles: Firstly, there are the sites themselves and the features which characterise them in their geographical and economic setting. The discussion of these and of the inferences which may be drawn from them regarding the way of life of the people

who inhabited them forms one major part of the thesis.

Secondly, there are the artefacts from the sites. The sections concerning these are more fragmented, because it would be superfluous to try to cover a subject matter dealt with more exhaustively elsewhere in connection with funerary finds than is possible here. Existing typologies are drawn on, therefore, with no more comment than is deemed essential, and discussion is confined largely to aspects of the Beaker material culture which are relevant to a domestic context, or which can only be seen in assemblages such as the domestic sites provide.

In this category comes the whole subject of Beaker rusticated and coarse ware. Such pottery forms an important element in the Beaker culture; but its full significance has been overlooked until very recently, simply because its use was primarily domestic, and because so little work has been done on domestic, as opposed to funerary, Beaker material. Since not even the most recent work by Clarke on the Beaker cultures covers adequately the typology, origins and affinities of Beaker rusticated pottery, another major section of the thesis is devoted to just these problems.

TERMINOLOGY

There are so many different terms in current use in connection with Beaker pottery and the Beaker cultures that some explanation of those used in the following pages is necessary to avoid confusion.

British Beakers

Up till now all classifications of British Beaker pottery have been modifications of the system originally propounded by Thurnam and Abercromby, or referable directly to it. Clarke wishes to dispense with this entirely, on the grounds that it is based on the criterion of form alone, and does not take into account decoration, fabric, associations or distribution. The system he proposes as an alternative, using a different terminology entirely, is more elaborate than any hitherto, and often more precise; but in fact, for the most part, it can be related to categories already established by use to a greater extent than Clarke would seem to allow. In particular, some similar concepts are to be found in Piggott's review of the Beaker cultures (Piggott S. 1963). For general purposes, therefore, Piggott's terms Short Necked (abbr. S.N.) and Long Necked (L.N.) Beaker have been retained in preference to Clarke's terms Northern and Southern Beaker respectively, simply because the former are the more familiar and seem to have essentially the same meaning. Clarke's subdivisions, i.e. Primary North British/Dutch (N₁/D), Developed Northern (N₂),

Late Northern (N3), and Final Northern (N4), Primary Southern (S1), Developed Southern (S2), Late Southern (S3), and Final Southern (S4), as published in outline by him (Clarke D.L. 1967), are used only where there is need to be more specific. On the other hand, the terms European (E), Wessex/Middle Rhine (W/MR) North British/Middle Rhine (N/MR) and North British/North Rhine (N/NR) Beaker have been used in preference to the more general Bell Beaker and Bell Derivative, and East Anglian (EA) rather than Barrel Beaker, because the former do refer more precisely to differences between the beakers themselves and their origins and distribution. Finally, the term Barbed Wire Beaker (BW) is used here, as commonly, to describe the technique of decoration by impression with a thread wound stamp, and, by extension, the culture characterised by beakers so decorated.

Beakers on the Continent

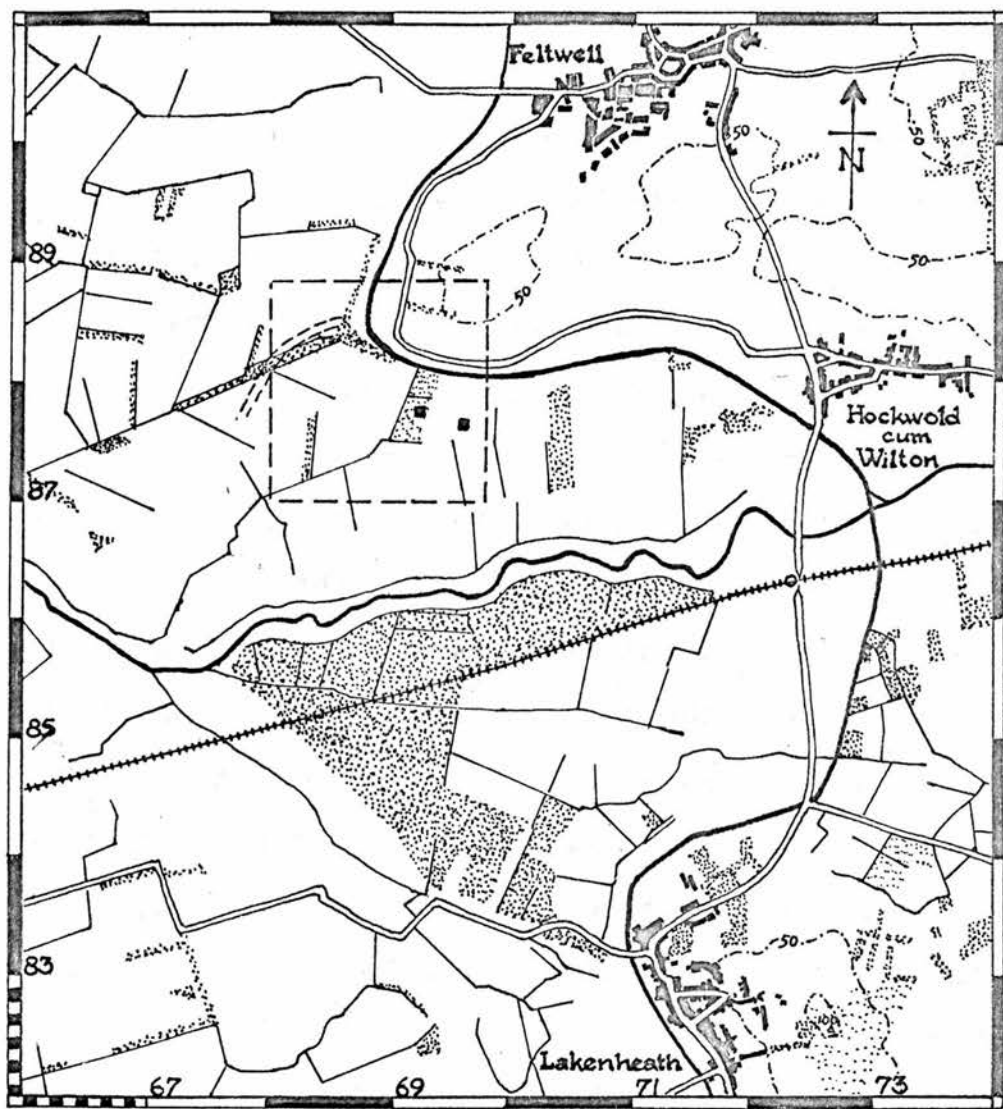
In discussing the beakers and Beaker cultures on the continent the classifications of Glasbergen and Van der Waals for the dutch Beakers, (Glasbergen & Van der Waals 1955), and Sangmeister for the beakers of the Middle Rhine region (Sangmeister 1951) have been followed. The classification of rusticated beakers on the continent is discussed at some length in Part IV, and only Lehmann's system for the Dutch Pot Beakers needs mention. His definitions of three categories of Pot Beaker, Trumpet Pot Beaker (TPW), Necked Pot Beaker (NPB), and

Belted Pot Beaker are outlined in a paper published in Helinium (Lehmann 1965), and these definitions have been adhered to, although the general term has been used here for a number of large beakers, or sherds of large beakers, with zoned plastic rustication which are not certainly or exactly like the known Dutch examples.

Techniques of Decoration



A distinction has been made between fine ware, by which is meant beakers decorated by means of a toothed or notched stamp or by incision, regardless of the actual quality of manufacture of the pot or the degree of excellence or otherwise with which the decoration is executed, and rusticated ware. This last term is used in a broad sense to describe the techniques of decoration used chiefly on Beaker coarse ware, and covers impression or jabbing with the articular ends of small bones, or with twigs, or circular, square or triangular stamps, although similar techniques, such as stamping with a cut or split reed or hollow bone, to form circular or crescent shaped impressions, were sometimes incorporated in the decoration of fine ware. The most common and characteristic methods of rustication on beakers, however, consisted of the non-plastic or plastic treatment of the surface of the pot, using the finger tips, finger nails and finger pinching. A non-plastic, or only very slightly plastic motif, involving paired, opposed finger nail impressions, is termed 'crow's foot' decoration, to distinguish it from the similar, but more heavily plastic pinching. On

some of the later Beaker rusticated pottery decoration includes ribs pinched up with the fingers or worked up with a tool. Sometimes, and on East Anglian Beaker pottery, especially, a similar effect of ribbing is achieved by parallel rows of horizontal or oblique finger nail impressions which lift the surface of the pot hardly at all. This tends to look a little like cord impressed decoration and, following a term used by Lehmann, is referred to as false cord, or pseudo cord decoration.



Scale - 1 : 63,360
1 in - 1 mile.

KEY

-  Woodland
-  Area shown in text fig. 2

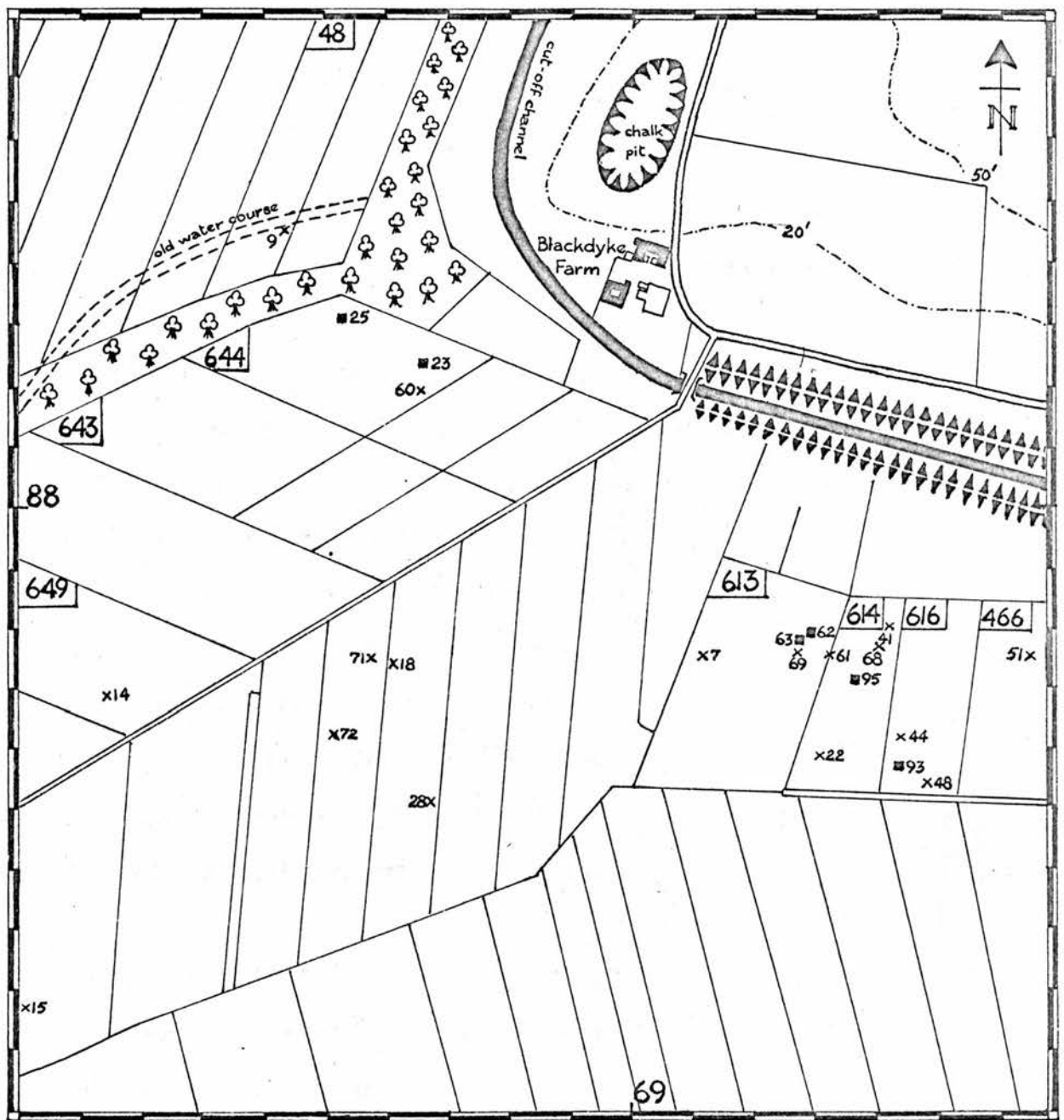
Text fig. 1: MAP OF HOCKWOLD AREA.

PART IHOCKWOLD-CUM-WILTONThe Site

Hockwold-cum-Wilton is a parish situated on the Fen edge in West Norfolk, less than a mile north of the Suffolk border. It lies about twelve miles respectively north east of Ely and north west of Thetford, in the valley of the Little Ouse. This is within the area described in the report of the Land Utilisation Survey as the Breck-Fen region (Mosby 1938 230), a marginal region between the higher Brecklands immediately to the east, and the Fen proper to the west. The fen peat at this point overlies chalk which is capped by sand deposits of varying thickness, and the recorded Beaker and other prehistoric sites are on slight hills or outcroppings of this chalk and sand. Although not exactly similar, the stratigraphy described by Clark in his report on the excavations at Shippea Hill, nearby, makes a useful and well documented comparison. (Clark J.G.D. 1933 1935a).

The Hockwold finds occur mostly within a radius of a mile of Blackdyke Farm, in an area skirting the rising ground which marks the extreme western edge of the Breckland. North of the main concentration of Beaker sites, the course of an extinct water way can be seen as shelly silt against the surrounding peat.

Before the last war, much of the fen in this area is recorded as having been derelict and in need of drainage



Scale - 1 : 10560

6 in. - 1 mile

KEY

- Beaker hearth or floor
- x Beaker sherds

Text fig. 2: HOCKWOLD, PLAN OF BEAKER SITES

(Mosby 1938. 230), and it is mainly within the last ten years that shrinkage of the peat, as a result of more efficient drainage and more extensive cultivation, has led to the exposure and discovery of the sites. Such derelict land as still exists supports scrubby woodland of birch, elder and hawthorn, with patches of reeds.

Surface finds of Beaker sherds and flints are common, and have been noted over most of the fields in the area indicated. The best recorded sites, however, form a fairly compact group in Fields 613, 614, and 616 on the O.S. 25 in. map of the area. Field 613 is uncultivated and is covered in scrub of the type described above; fields 614 and 616 were ploughed for the first time in 1961, since when, numerous surface finds have been made in them, including two stone bracers, one with a single perforation at either end and one, broken, with three perforations at one end, as well as considerable quantities of flints and sherds of Mildenhall ware, Beaker, Food Vessel, Middle Bronze Age and Romano-British pottery. Of all these, Beaker material is by far the most common.

Mr Frank Curtiss, who recorded most of these finds, conducted small scale excavations on the sites of some of the greater concentrations of material during the years between 1962 and 1966. These excavations were in the nature of a rescue operation, since the peat is shrinking and being blown off at an estimated rate of 2in. a year, and the sites are usually available for only one year, after discovery during ploughing, and before

the sowing of the next crop, before being destroyed completely by the plough.

Sites excavated in the fields already mentioned, and in O.S. Field 644, include several hearths and 'floors' producing Beaker material, two hearths, side by side, built of puddled chalk and associated with sherds of Bucket Urn type, and traces of occupation by people using Mildenhall Ware and Food Vessel pottery.

Method

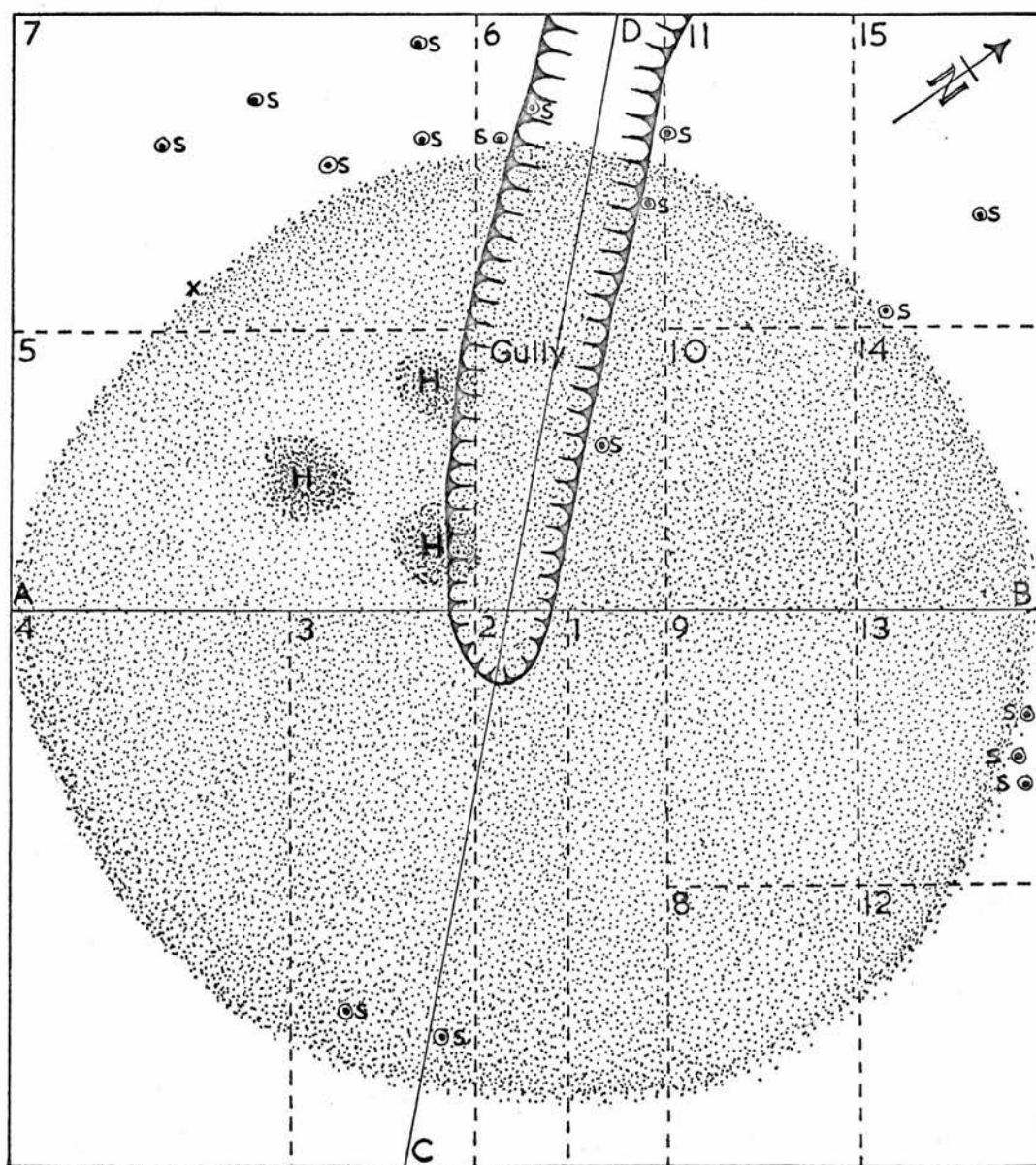
The excavator usually dug each site in a series of small, numbered squares or rectangles, the finds from each being kept separate and their stratigraphical position roughly noted. Records, where kept, consisted of measured sketch plans of the main features of the sites in relation to the excavators grid, sections, and sometimes photographs. The approximate positions of the sites were determined by measuring their distance from the two nearest field boundaries, and were marked on the O.S. 6in. and 25in. maps accordingly.

Field 616: Site 93¹

Map Ref. TL/69418758


This site is the most complete and informative excavated. An exploratory trench, 4ft. wide, revealed evidence of an occupation 'floor' about a foot below the surface of the plough,

1. The sites and finds from Hockwold are numbered in sequence in the records of Norwich Castle Museum, and these numbers have been retained here.



Scale - 1 : 48

KEY

-  Occupation layer
- H** Hearth
- s** Stake hole
- x** Fragment of stone axe

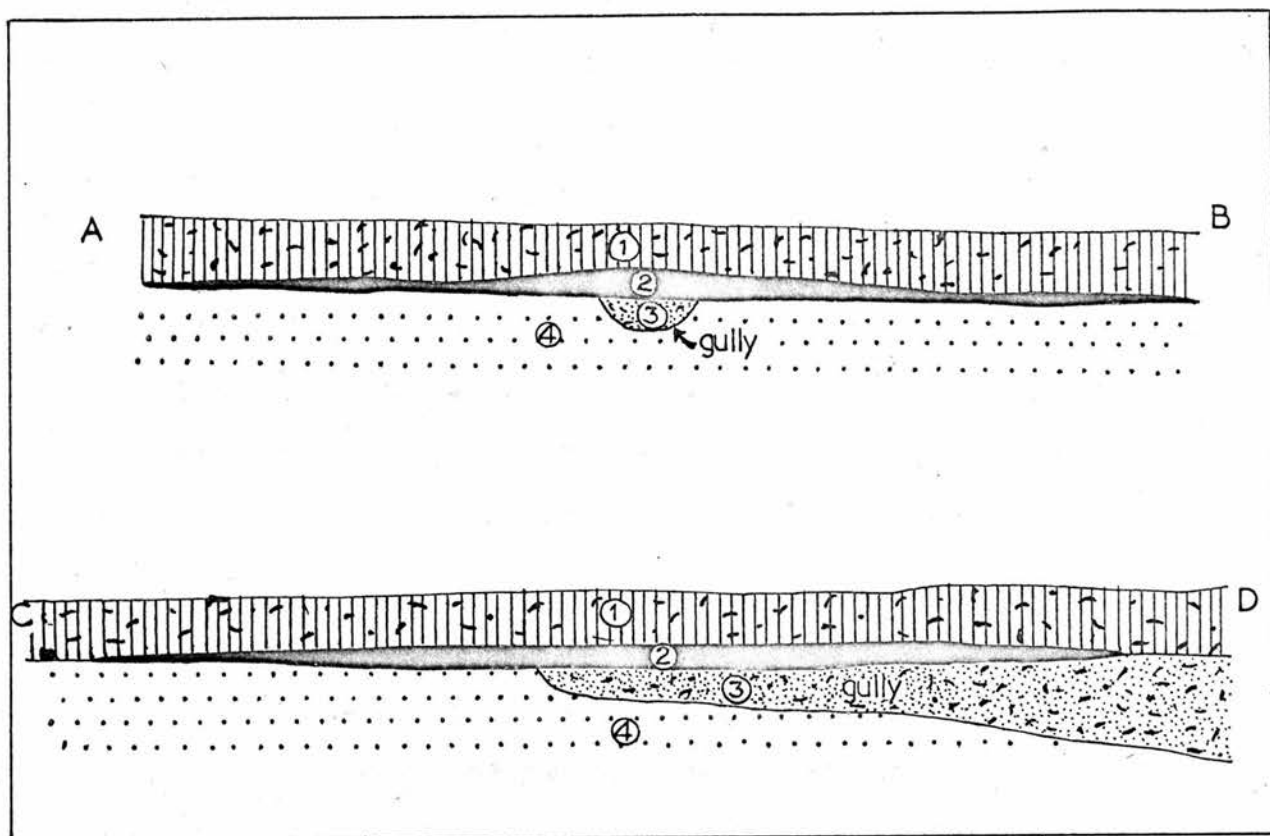
Text fig. 3: HOCKWOLD, SITE 93: PLAN OF 'BEAKER' 'FLOOR'.

and the trench was then extended in measured squares in order to find the limits of the feature. This proved to be roughly circular, and was some 22ft. in diameter and up to 8in. thick in the centre. It consisted of a layer of dark, humic sand (layer 2) containing much charcoal, animal bone, flints, a few bone implements and Long Necked Beaker pottery. In the western quadrant of this area were three concentrations of charcoal suggesting hearths, though there was no sign that these had been built or in any way prepared.

The 'floor' was stripped, and 17 stake holes were recorded, each containing the point of an upright stake between 1in. and 2in. in diameter, identified by the bark remaining as birch. These stakes formed a roughly semi-circular setting around the north and west sides, with a few more scattered on the east and south sides. There appear to have been several more possible stake holes which did not contain wood and which were not recorded.

Beneath the 'floor' and partly sealed by it was a gully in the underlying sand, running from the centre of the area to beyond its limit on the north west side. This sloped in depth from 6in. at the south east end to over 2ft. deep, and was filled with dark soil (layer 3) containing animal bones, pottery of the same type as was found in layer 2, and large fragments of wood. The excavator suggested that this might have been a spring, filled with brushwood to level it.

There is little doubt that this is a single period site. The pottery is consistent with such a conclusion, being all of



Scale - 1 : 48.

H.M.B. after F. Curtiss.

KEY

- ① Plough - dark, sandy peat containing pottery, animal bone, flint, etc.
- ② Occupation layer - dark sand containing charcoal, pottery, animal bone, flint, etc.
- ③ Fill of gully - black sand containing wood, pottery, animal bone, flint.
- ④ Sterile sand.

Text fig. 4: HOCKWOLD SITE 93 : SECTIONS THROUGH BEAKER 'FLOOR'

Long Necked Beaker of Late/Final Southern type, and, judging by the repetition and similarity of many of the forms and motifs, probably the product of a small group of potters working together. There does not seem to be any obviously intrusive material.

The scatter of sherds and other material was confined almost entirely to the 'floor' area and was densest, though not markedly so, in the northern and western quadrants, around the hearths. The surface of the deposit seems to have been disturbed by the plough, since the plough-soil (layer 1) directly overlay it and contained sherds matching those from it.

The deposit was fairly deep, but apparently without any internal stratification. The sherds from any one of the considerable number of pots represented were scattered widely over the whole area, and there was nothing to indicate that the site had not been continuously occupied throughout its period of use.

Field 613: 'Oaks' site - Sites 62, 63 and 69 Map Ref. TL692877

Field 613 has never been ploughed, and sites were therefore undisturbed, unless by tree roots. The three areas, which adjoin one another, total approximately 1185 sq.ft., but Site 69 is the only one of which plans and sections exist. They are arbitrary divisions and there is a considerable overlap of material between them, so that it seems pointless to consider them separately.

Site 62 (TL/69278779) consisted of a hearth only. There were three sherds from it: One was of a Long Necked Beaker, P.63.062, the rest of which is recorded as having come from Site 63; the others are like no other pottery found in the area. Both are rim sherds between $\frac{1}{2}$ and $\frac{3}{4}$ in. thick and with plain squared rims; one of them is undecorated, the other has two small, closely spaced bosses, similar to those on a 'Grape cup'. The fabric of both is black with a smooth, glossy surface and contains flint grit.

Site 63 (TL/69258878) was an L shaped area measuring 24ft. x 12ft. and excavated to a depth of between 2 and 3ft. At the eastern end of this, at a depth of 18in., was another hearth. It was 4ft. x 6ft. across and consisted of a roughly circular hollow, 7in. deep, dug into the chalk and filled with a mixture of ash, charcoal, burnt flints, a few pieces of burnt clay, and sherds of Long Necked beakers, including a handle.

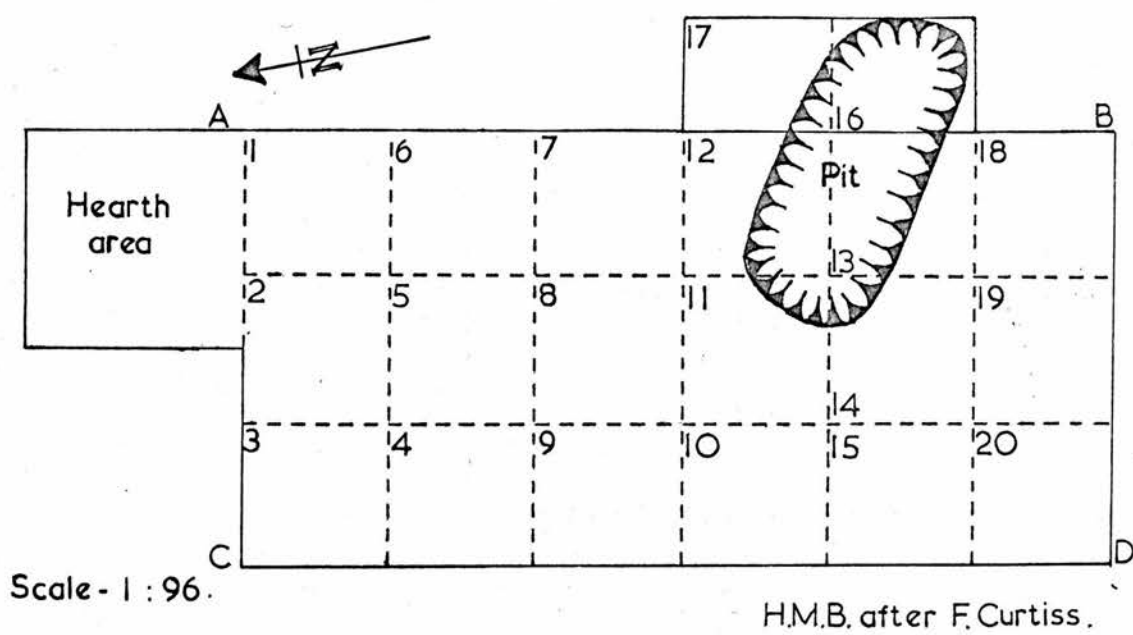
Amongst this fill were several lumps of haematite, mostly small, and some large pieces of burnt quartzite. The latter had possibly been used to line the hearth, since it would not shatter as does flint, which is the most common stone in the region. The presence of the haematite is puzzling. Flecks of it are found in the fabric of Beaker pottery from this and several other sites in various parts of southern and eastern England (e.g. Overton Down, Site OD XI: Fowler P.J. 1967b. 31.), and fragments of limonite and haematite occurred together with sherds of Beaker and Food Vessel pottery and other debris of

presumably domestic origin in the mound of Beacon Hill Barrow, Barton Mills, about 8 miles from Hockwold. Its source in the Fen Edge region is not known; it may have been imported from elsewhere, and was perhaps in general use as a pigment.

Around the hearth, at a similar depth to it, was a plentiful scatter of Long Necked Beaker sherds, flints and animal bone. Mr Curtiss states that there were several stake holes within this area. He thinks that three or four of them may have been set in a straight line, but was unable to see any overall plan. Several of them contained carbonised wood.

Site 69 (TL/69268776) The area excavated was rectangular, orientated north-south, and measured approximately 58sq.ft. It was divided into 18 squares of 6ft. and two rectangles of 5ft. x 6ft., and at the north end of this area was a 9ft. square labelled 'Hearth I'. This last poses a problem, as Mr Curtiss is certain that there were only two hearths on the 'Oaks' site. The only finds labelled as being actually from hearth pits are from Site 62 and Site 63, and both are labelled 'Hearth I' also. The rest of the material from Site 63 is labelled 'Hearth II area', but there is nothing labelled as being from Hearth II itself.

There is no large scale plan showing the exact positions of the sites relative to one another, but the map references given indicate them roughly, with Site 63 between Site 62 to the north and Site 69 to the south (Text Fig. 2). The Site 62



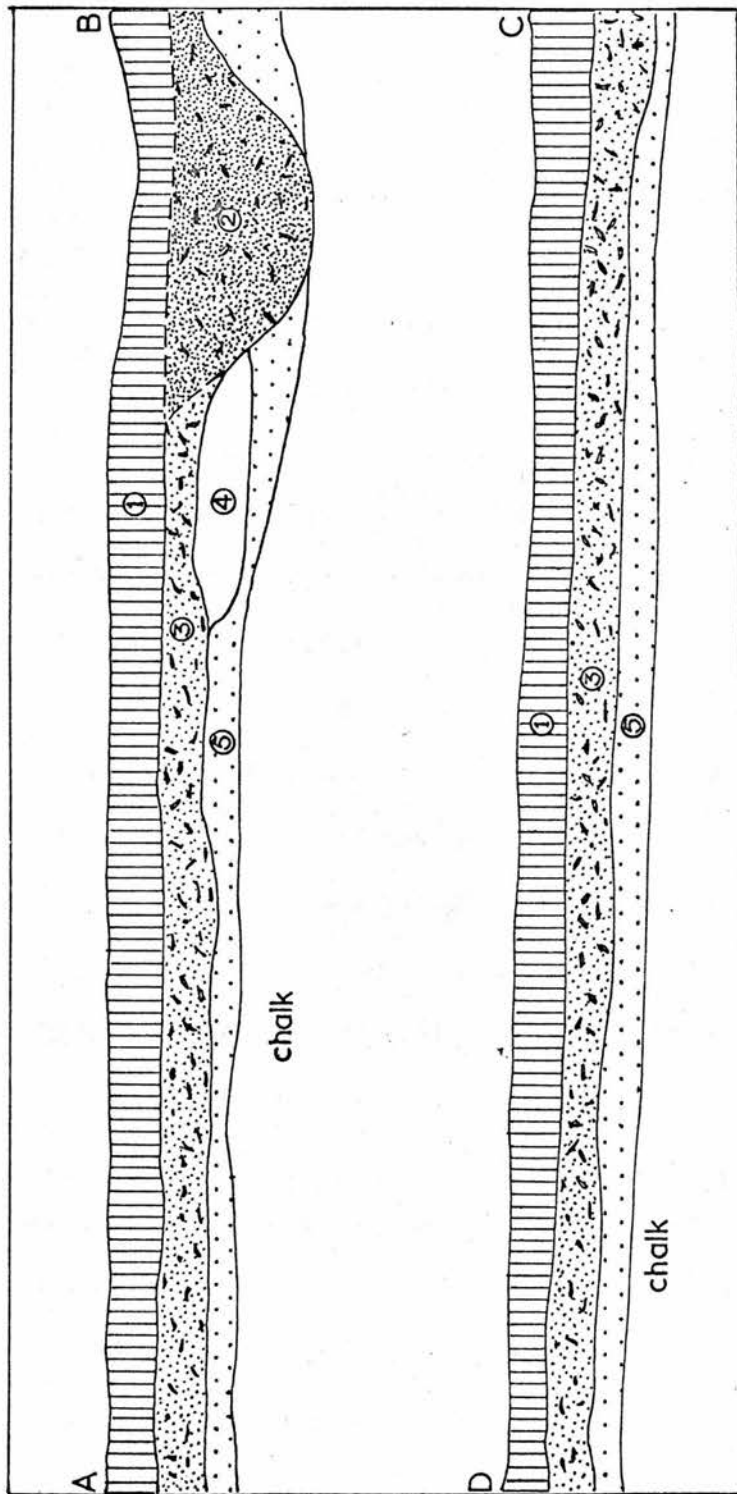
Text fig 5: HOCKWOLD SITE 69 DIAGRAMMATIC PLAN OF AREA EXCAVATED

The Site 62 and Site 63 hearths are certainly not one and the same: the recorded internal evidence for a direct connection between Site 62 Hearth I and any of the material from Sites 63 or 69 consists of one sherd only. It is even likely Site 62 has nothing to do with the Beaker occupation of the site.

'Hearth I' of site 63 is probably the same as 'Hearth I' of Site 69, the latter referring to the area immediately next to the hearth itself, and must be presumed to be meant for Hearth II: the pottery from both is nearly all very much of the same type, and several sherds match. On the other hand, much of the pottery labelled 'Hearth II area' differs from that of the Hearth.

The only feature marked within the area of Site 69 was a large oval pit, apparently of Beaker date. It measured 14ft. x 6ft. at the top, and was 3ft. deep with sloping sides. The fill was very dark sand, greasy in texture (Layer 2), and contained animal bone, flints, and 'Western' neolithic and Beaker sherds.

Below 12 in. of mixed sand and peat (Layer 1), an occupation layer 6 - 12in. thick, of dark, humic sand (Layer 3), extended over and beyond the area of excavation. From this came pottery, flints, animal bone, fired clay lumps and pieces of daub. The flints, as a whole, are characteristic of most Beaker assemblages, although there are a few types represented, leaf arrowheads, for example, which evidently belong to the earlier phase of occupation. The sherds represent a large number of pots, most of which are of Long Necked, or Southern



Scale - 1 : 48.

H.M.B. after F.Curtiss.

KEY

- ① Topsoil - dark, sandy peat.
- ② Fill of pit - very dark, greasy sand containing animal bone, pottery & flint.
- ③ Occupation layer - dark sand containing pottery, flint & animal bone.
- ④ Chalk - possibly from digging of pit.
- ⑤ Clean white sand.

Text fig. 6: HOCKWOLD SITE 69, SECTIONS ACROSS AREA EXCAVATED

Beaker type, with one or two East Anglian and European (?) Bell Beakers, but which include Mildenhall Ware and Food Vessel.

The occupation layer rested on clean, sterile sand, which formed a capping little more than 6in. thick over the chalk.

Purely on the basis of typological analysis of the Long Necked Beaker pottery it seems as if there may be two or three separate phases of occupation by that group represented here. There is no stratigraphical evidence of this, although if the sherds belonging to the different typological groups are plotted separately, according to the square or area in which they were found, there are slight, but not conclusive differences of distribution. Thus, one group, typologically the earliest, is scattered most densely on the south side of Site 69; the second is concentrated in the centre of that area and most densely within Site 63; the third, and latest seeming group is fairly evenly scattered over the whole area, but with a slight bias toward the northern end. (See Text Fig. 7)

Since the exact positions of the two hearths are not known, there can be no certain identification of these pottery groups with either. However, much of the pottery from Site 63 'Hearth I' and from Site 69 'Hearth I' is of the latest looking type, and the second pottery group, which could be contemporary with the earliest looking group, is associated particularly with the area labelled 'Oaks' Hearth II area'.

The separate occupations of the site represented by the Mildenhall Ware and Food Vessel sherds are ill defined strati-

| | <u>Beaker</u> | <u>Early</u> | <u>Later</u> | <u>Latest</u> | <u>F.V.</u> | <u>Neo.</u> |
|----------------|---------------|--------------|--------------|---------------|-------------|-------------|
| <u>Site 69</u> | | | | | | |
| Hearth area: | X | | XXXX | XXXX | X | XX |
| Square 1 : | | | | XX | | X |
| 2 : | X | | | XX | | |
| 3 : | | | X | X | | X |
| 4 : | X | | XX | XX | | X |
| 5 : | | | X | XX | XX | X |
| 6 : | | | XXX | | X | |
| 7 : | X | | X | | X | X |
| 8 : | X | | XX | XXX | XXXX | X |
| 9 : | XX | | X | XXX | X | XX |
| 10 : | | | XX | XXXX | X | XXXXXXXX |
| 11 : | | | X | | XXXXX | |
| 12 : | X | | X | XXXX | XXX | X |
| 13 : | X | | X | X | | XXXXX+ |
| 14 : | X | | XXX | XXXXXXXX | XXX | XX+ |
| 15 : | XX | | | X | | X |
| 16 : | X | | | X | XX | XXXX |
| 17 : | | | | | | XXXX |
| 18 : | X | | | X | XXX | XX |
| 19 : | XXXX | | XX | X | XXX | X |
| 20 : | X | | | XX | XX | |

Site 63

| | | | |
|--------------|-------|--------|----------|
| Fire Pit : | X | | X |
| Hearth area: | XXXXX | XXXXXX | XXXXXXXX |
| | | XXXXX | |

Key

X = the sherds of 1 pot in any given area. (minimum value)

F.V. = Food Vessel

Neo. = 'Western' neolithic pottery of Mildenhall type.

Text Fig. 7 HOCKWOLD 'OAKS' SITE: DISTRIBUTION OF POTTERY.

graphically, though the finds of each were concentrated in the southern part of Site 69. No vertical stratigraphy was apparent, to demonstrate their relationship to the Beaker occupation.

Other Sites

The apparent concentration of Beaker sites in Fields 613, 614 and 616 may be due to the fact of their not having been ploughed until recently, and to a more exhaustive search here than elsewhere.

The majority of the sites marked record finds of surface material, often insufficient quantity to suggest a 'floor' beneath; others are of unrecorded excavations which revealed no identifiable features. The latter include Site 95 (TL/69358771), which is described as a 'probable hut floor', and which produced quantities of flints, animal bone and sherds of rusticated, comb impressed and incised Late/Final Southern Beaker pottery, very similar in all respects to that from Site 93. Find 44 consists of a nearly complete beaker of Final Southern type, with a profile tending toward the biconical, and a narrow zone of spaced pinches round the base, and Find 48 of a group of sherds of developed and Late Southern Beaker type. Find 22 is a collection of Long Necked Beaker sherds, of similar type.

At some distance from Fields 613, 614 and 616, a further small group of hearths was excavated. Site 23 (TL/68648823) consisted of two hearths from which came a group of sherds which resemble, in a general way, some from the second group on

the 'Oaks' site. Specific parallels can be drawn with P63.062 and P69.137. In the latter instance, the two sherds in question are so similar that it is possible that they came from the same pot, in which event their presence in two find groups from widely separated sites must be the result of contamination. Also from Site 23 came animal bones and a characteristic Beaker flint assemblage which included a polished flint axe.

Discussion

The interpretation of the exact function of these sites and of the nature of the settlement as a whole is a problem. Site 93 presents the most concrete features, and it seems doubtful that these are the remains of a roofed structure. The stakes were rather insubstantial and appeared to have been set upright, and there was no sign of any centre post, such as would be necessary in these circumstances to support a roof for an area of this size, nor any evidence for daub or other building material. Furthermore, common sense and the limited amount known about Beaker domestic structures (e.g. Greenfield 1960 18.) suggests that hut sites would not contain such a large and squalid accumulation of refuse as this 'floor'. It seems more likely that this was an outdoor area for some domestic activity, and that the stakes represent a windbreak or fence.

The material from the site is domestic and unspecialised in character, but contains evidence for both flint working and pot manufacture. Site 93 cannot be related to any other structures

or features in the vicinity, but it seems that others of the Hockwold sites, including the 'Oaks', represent parts of similar working areas. None of the deposits have the appearance of middens.

No evidence has been found anywhere among the whole group of sites which can with certainty be interpreted as a hut. The only indication of any built structure other than the stake setting round Site 93 consists of the few pieces of what appears to be burnt daub from the 'Oaks'.

Although none of the features of the site as a whole are such as to imply permanence, and the 'floors', hearths, and pit all appear to have been open to the sky and randomly placed, they seem to have been grouped in clusters. If this is so, too little has been cleared for any pattern to emerge in the grouping.

The quantity and variety of material here, of pottery in particular, and the size of the area over which the finds are scattered along argue something more than a camp of short duration, and the lack of evidence for hut sites cannot be taken as conclusive proof that huts were not built here, even though the conditions are such as would tend to the preservation of such evidence. Exploration has been on a small scale and rather haphazard.

Leaving aside, for the moment, the larger question of Beaker economy in general, the remains on the Hockwold Beaker sites indicate that the occupants practised mixed farming.

The evidence for animal husbandry is the most prominent, bones of ox and sheep, or goat, being particularly numerous, and pig being present also. Hunting, chiefly of deer was evidently important as a source of meat and other commodities. A few sherds which incorporate impressions of cultivated grain, probably barley, are the sole evidence for agriculture, but their value is enhanced by similar finds on other sites. The large pit on the 'Oaks' site may have been used for food storage originally. Such an economy would allow no more than seasonal movement of the population, and it remains to decide whether this site in particular represents a long term occupation of several years at least, or short term, perhaps seasonal occupation, by a community or communities practising some kind of shifting agriculture or even transhumance.

The latter alternatives seem the more likely. The bulk of the Beaker material belongs to one cultural group, that termed by Clarke the Southern Beaker, and apparently to more than one phase of that group or sub-culture, although the precise chronological significance of this is conjectural. Certain differences between the pottery of different 'floors' or hearths could be the work of different groups in the same community, different phases of the same community, or of different communities entirely. If it is assumed that this was a single, permanent settlement, the area occupied is either very large for such a small community as we must suppose could support itself by means of primitive agricultural methods

and a largely non-metal technology, or very scattered. The absence, too, of any sign of internal stratigraphy on the individual sites, despite the abundance of material, means that there is no very positive argument to support the idea of permanence. A possible solution is that the settlement as a whole was fairly static, but that the inhabitants built no permanent house structures and shifted about within a limited area.

The nature of the environment in this region at the time of the Beaker cultures is supremely relevant to the question, and constitutes the most forceful argument against the settlement having been of a permanent nature. Excavation of the Hockwold sites has produced little information concerning this, but what there is can be supplemented by the results of the excavations at Shippea Hill, three miles away. (Clark 1933; 1935a.) Here it was demonstrated that representatives of the Long Necked Beaker and Food Vessel cultures occupied what were then low sand hills or islands surrounded by fresh water fen, represented by the bottom few inches of the upper peat. At Hockwold, apart from the nearness of the sites to the Fen edge, conditions must have been similar. At Grange Farm, less than a mile from the Blackdyke Farm sites, mollusca from, neolithic and Beaker pits on the higher ground, excavated in 1961 and 1962, also indicate a thinly wooded, if slightly drier environment (Salway 1967).

The sand hills can never have supported more than light, fairly open vegetation. This is confirmed by the results of pollen analysis of the earlier peat levels, although the levels representing the period of the Beaker occupation are too distorted for this purpose by the effects of drainage, surface erosion and ploughing. (Clark and Godwin 1962). As sites for settlement they cannot have been very comfortable and would appear to have been partially waterlogged, judging by the quantity of wood preserved on them. Nowhere has there been found any sign that any attempt was made to build up or extend the surface they provided by means of brushwood platforms or pile structures.

We may reconstruct a landscape of small sandhills and islands merging into the gradually rising ground to the east, and extending westward into a region of marshes and fresh water meres. The higher ground would support light, fairly open woodland, including birch. This seems an environment more suited to hunting, fishing and wildfowling than to settled agriculture, and to offer less to attract the farmer than the Breckland to the east except perhaps, a more sheltered site. It will be noted that the animal bones from the site with the possible exception of the otter, do not include any species which reflect hunting, fishing or wildfowling specifically in the Fens, but this could be fortuitous.

If the settlement at Hockwold does represent a series of seasonal occupations, the 'floors' could be explained as areas

of outdoor, communal domestic activity, and the large amount of pottery and other debris as the refuse of more than a single family unit, built up quickly over a period of a few months at most. A high breakage rate in pottery would not be surprising in the circumstances! The exact duration of each occupation, and the total length of time represented by all the Long Necked Beaker material from the whole series of sites is impossible to estimate, since there is as yet no evidence other than the purely typological, and the chronology of the later phases of the Beaker culture is, at best, largely a matter of guesswork. It is hoped to obtain a radiocarbon determination from the wood from Site 93.

PART II

FINDS FROM BEAKER DOMESTIC SITES

HOCKWOLD-CUM-WILTON: POTTERY

Method

The pottery from the Hockwold sites comprises several thousand sherds, most of which are small in size. The sherds in each find group were sorted and matched according to the motifs and style of decoration, the stamps used, and the fabric, colour, thickness and approximate size of the pot.

The number of pots represented was roughly estimated on the basis of this procedure. The catalogue (Appendix I) gives numbers which must be regarded as a maximum estimate: the minimum numbers are represented by the more complete pots and by a few isolated sherds with particularly distinctive decoration.

None of the pots is complete, but it has been possible to attempt a partial reconstruction of quite a large number of them. Classification has been according to the system put forward recently by D.L. Clarke, (Clarke D.L. 1967) although its application here has often been a matter of part-guesswork when the complete profile and the overall scheme of decoration of the beaker have not been certain.

It was noted that sherds from P93.037 and P93.048 were among the material marked 'Find 22', and that what appear to be rim sherds of P93.006 were among the sherds from Site 95.

It must be assumed, therefore, that any of the find groups under discussion may be contaminated, although a close examination of the material of all the major finds does not suggest that this is serious.



Eden Grove

Bond

TUB SIZED - UNDRYED

9

DescriptionField 616: Site 93

There is an estimated minimum of 60 Beaker vessels from the site, of which 32 are rusticated and 3 have mixed decoration of incised or comb impressed and pinched rustication. Nine of the rusticated vessels are of large size, with rim diameter estimated at 8in. or more, and over 50% of them, both large and small, have zoned rusticated decoration. There is no certain evidence for vessels without any decoration.

The forms among the fine ware, insofar as they can be reconstructed, are nearly all of Long Necked Beaker type, with cylindrical or incurving necks and pronounced shoulders, either rounded or angular. At least six of the fine ware beakers have a raised cordon, apparently applied, on the neck just below the rim (P93.002; 009; 012; 013; 015; 018.), and there are at least two handled beakers. One unusual rim sherd is from a small beaker with a marked convex curve to the neck, which precludes a long necked profile, and a rolled rim. About 1in. below the rim there is a double perforation, presumably to take a thong or string for suspension (P93.008). The fabric and decoration of this pot are comparable to others from the site, but it did come from the disturbed layer from above the occupation floor itself, so there is a possibility that it does not belong with the rest of the material. Perforations below the rim are a normal, if not very common feature of Beaker pottery, usually of the larger, rusticated vessels.

The rusticated pots seem to be nearly all of beaker form. The smaller ones, both zoned and non-zoned, are very similar in profile to the fine ware beakers, with a cylindrical neck and marked shoulder, and some with a suggestion of a rim cordon. The larger vessels seem to be a little more varied, but retain the basic beaker form of cylindrical or flaring neck and rounded belly. The profile does tend to be slacker and more curvilinear than that of the smaller vessels, without any sharp constriction at the base of the neck. There may be other forms represented, though this is not certain: P.93.038 could be from a straight sided, flower-pot like form; and it is possible that P93.050 is to be reconstructed as a large bowl form.

The majority of the fine ware beakers are decorated in the comb-impressed technique; very few are incised. On the rusticated ware the most common techniques are 'crow's foot' and more plastic pinching with the finger nails and with finger and thumb, and pinched ribbing. Generally speaking, the larger the vessel, the more heavily plastic the rustication. There are a few examples of other types of rustication, including one beaker decorated entirely with impressions made with the articular end of a small bone (P93.035), and several examples of more unusual uses of the technique of pinched rustication, to form a chevron pattern, for instance (P93.068), or a metopic scheme (P93.067).

The pots appear to be ring built; on some, the breaks along the lines of the rings are clear. The fabric and colour of the pots is fairly uniform. Most of the sherds are mid-brown or, more occasionally, reddish brown in colour, and are hard fired with a smooth, in some instances almost burnished surface. Fine grit of burnt flint is present in most sherds, and also some grog, usually fine, but coarser in the larger vessels. The fabric of the really large vessels, such as P93.037 and P93.048, tends to be more open, though still fairly hard.

Field 613: 'Oaks' Site - Sites 62, 63 and 69

The number of Beaker vessels from the 'Oaks' site is estimated at an absolute minimum of 95, of which total 31 have rusticated decoration, and a further five a combination of comb stamped and rusticated decoration. At least nine of the rusticated vessels are of large size, with an estimated rim diameter of 8in. or more. There are some 150 undecorated sherds whose fabric matches that of the beakers from the site, mostly of the larger, coarser wares, and one or two of these do appear to be from wholly undecorated vessels. The rest are too small for certain identification.

The vessels are almost all very incomplete and in a very fragmentary state, which makes reconstruction of the profile and scheme of decoration difficult. Of the fine ware, the forms and decoration seem to be nearly all of Long Necked

Beaker type, with cylindrical or, more rarely here, slightly flared neck, and a distinct shoulder, usually rounded. A few, such as P63.092, or P63.094, have a slightly raised cordon below the rim, but this is not a common feature. There are at least two handled beakers. In addition to the Long Necked beakers there is one Short Necked beaker, P63.010, of Developed Northern (N2) type, and a number of sherds possibly of European and East Anglian Bell beakers, P69.001,002,003, P63.004, P69.008, P63.011.

Most of the fine ware vessels are decorated in comb impressed rather than incised technique, but the standard and neatness of execution varies considerably. Nearly all the usual techniques of rustication are represented on pots from the site, but the most common are, once again, 'crow's foot' and more plastic pinching and pinched ribbing. On one or two sherds, such as P69.180, the 'pinched rib' effect has been obtained by working the surface of the clay with small slivers of wood or bone. Relatively few of the vessels seem to have zoned rustication, and even on these it is not usually of a very elaborate order. The combination of pinched and impressed rustication in a zoned scheme on the same pot, as found on P69.179, is rare but found elsewhere, including Site 93 (P93.058). There is at least one vessel with non-plastic zoned rustication consisting of paired finger nail impressions in horizontal and vertical rows (P63.178), and another sherd with flat 'ribs' in something like the 'false cord' technique more usually found

in association with East Anglian Beaker pottery (P69.196). Noteworthy also, are two vessels decorated with bumps pinched from four sides with the finger and thumb (P63.169, 069.174), in a fashion more common on Dutch Veluwe and pot beakers and rare in England. Very thick walled vessels with clubbed rims, such as 69.168, are rare everywhere in a Beaker context, but there is another sherd from a similar vessel, found in the same field at Hockwold (Fig. 24 A). They seem to be from bowl-shaped vessels. One small beaker decorated all over with small, comma shaped jabs is of interest because the complete profile can be reconstructed. It is a completely normal long Necked Beaker type, with a slightly flared rim and angular shoulder. (P63.145)

It is clear that this is a mixed group of pottery, possibly including more than one of Long Necked or Southern Beaker type, and this matter will be discussed more fully later. The differences are primarily typological, but there is considerable variation in fabric and colour which may also be of significance.

The colour of the pots ranges between buff, through brick red to a dark reddish brown, but the most usual colours are buff or mid-brown. Fabrics are mostly fairly hard and close textured, containing a little fine grit of burnt flint and often some grog, but soft, flaky ware, fabric containing grog only, sandy ware, and rather more coarsely gritted ware are

are also found. Most of the sherds marked as coming from Site 69, Square 11 have a much higher and coarser grit content of burnt flint than any others from the site, and none match sherds from the rest of the area. Sherds from the 'Oaks' site, and particularly from what seems to be the latest Beaker pottery group from that site, tend to be rather softer and more weathered than the majority of sherds from Site 93.

In addition to the Beaker pottery from the 'Oaks' site there is a small quantity of sherds of Mildenhall ware (Fig. 27). These came chiefly from the south west part of Site 69, and were concentrated in and around Square 13. They are all of dark grey, hard fired pottery containing a coarse grit of burnt flint which often protrudes from the surface. Forms are simple, including plain, rolled and thickened rims, usually with a concave profiled neck and softly rounded shoulder. Decoration is absent, apart from a herringbone pattern incised round the rim of one vessel (Fig. 27:b).

Sherds of Food Vessel were also found, concentrated in the same area of Site 69 as the Mildenhall ware sherds. They are of Vase type, sometimes with very broad, heavy rims, bevelled internally and overhanging, which suggests an affinity with Collared Urns of the primary series, or perhaps in the hybrid tradition described by Longworth (Longworth 1961. 285). Decoration is usually confined to the rim, both inside and outside, and consists of spatula impressed herringbone patterns, circle and other small stamp impressions, and cord impressed lines. (Fig. 28). The fabric of these pots

is usually open and friable, containing coarse grog, but with a smooth surface. Similar sherds came in greater quantity from Sites 61 and 68, about 55 yards to the east, and others closely resembling it are found elsewhere in the Fen edge region, at Peacock's Farm, Shippea Hill, for instance (Clark J.G.D. 1935a. Fig. 9), or from the river Wissey, near Stoke Ferry.

Field 614/616: 'Beaker Floor'

There is one group of pottery from Hockwold about which nothing is recorded beyond the fact that it came from a 'Beaker floor' in Field 614 or 616, but which is of sufficient interest to merit discussion. If it is from one of the recorded sites, this is most probably Site 51.

A selection of the sherds is illustrated in Fig. 29. Their decoration and fabric have sufficient characteristics in common to suggest that they are of a single group. The forms and decoration are apparently of Long Necked Beaker pottery, although not wholly typical. Several appear to be from straight sided or bag shaped vessels, others are from beakers. Nearly all are rusticated, the predominant technique being impression with the articular ends of various small bones, or with semi-circular stamps which imitate the effect of finger tip impressions. There is at least one pot with zoned, ribbed rustication, and several sherds with various forms of finger nail impressed and pinched decoration. One shoulder sherd (Fig.29:c) combines a zone filled with comb

impressed hatching with a zone of what appear to be impressions made with a length of very loosely twisted fibrous material. A rim sherd with a perfectly straight profile, decorated with narrow zones of horizontal comb impressed lines alternating with wider zones containing widely and regularly spaced pinches, (Fig.29:a) recalls both a beaker from the domestic site below Chippenham Barrow (Leaf 1940. Fig.19), and Grooved Ware vessels from Woodhenge (Cunnington 1929 Pl.37,38), though it resembles neither closely. It is presumably from a beaker, and serves particularly well as an example of the stylistic link between the later Beaker pottery and some Grooved Ware. Another vessel of great interest is a small dish, slightly under 4in. in diameter, and decorated with an incised chevron pattern (Fig.29:b). There is no reason to suppose that it does not belong in a Beaker assemblage.

The fabric of these sherds is, for the most part, hard, containing a little flint grit and some grog, and with an almost burnished finish. In colour they are mostly dark brown Fig.29:a is black, and Fig.29:b, the shallow dish, is of a lighter, reddish brown.

It is probable that this group does not represent the entire find, otherwise the absence of fine ware would be remarkable. Even so, the predominance of what are rather rare techniques of rustication elsewhere among Beaker pottery, makes the assemblage particularly distinctive.

Discussion

The first, and obvious, point to be noted in a discussion of the pottery from the Hockwold sites is that the material from the two main sites differs. If the individual beakers from each site are analysed and grouped according to the categories of decorative system and motif defined by David Clarke, and the results compared with similar analyses of the pottery from other sites, those from Site 93 are consistent with a single period assemblage, as is to be expected from the circumstances of the find, and can be classified as Late Southern (S3) verging on Final Southern (S4). Those from the 'Oaks' site, however, embrace a range of styles wider than is to be expected from a single period find, and represent Clarke's Developed, Late and Final Southern Beaker phases (S2-S4), in addition to the Short Necked, or Northern beaker and the various types of Bell beaker which could be at least partly contemporary with and intrusive among the Long Necked beakers, or else residual on the site.

Clarke stresses the fact that in a continuously developing pottery tradition both archaic and forward-looking styles will be represented, and that the classification of any group will depend on the most common styles in current use (Clarke D.L. 1967 183). Even when one bears this in mind the pattern of the incidence of various styles in relation to one another amongst the pottery from the 'Oaks' site suggests that at least two separate groups are in question. A more subjective

assessment of the material indicates that there may even be three. The first group, and the earliest typologically, according to Clarke's system, is that represented by such beakers as P63.022, in which simple designs in narrow zones are combined to form a band of decoration covering most of the neck, and two or three narrow bands of decoration alternating with undecorated zones of almost equal width over the rest of the body. Even simpler schemes are represented by P69.006, in which narrow decorated and undecorated zones of equal width alternate over the whole body. A more developed group consists of Beakers in which the decoration is arranged in two broad, principal bands on neck and body, with a break between them at the base of the neck. This style was in most frequent use during the late Southern Beaker and, to a lesser extent, in the Final Southern Beaker phase. Large filled triangles, metopic designs, and floating lozenge and hexagonal panels are used to fill these broader areas of decoration. Finally all idea of dividing the surface of the pot is abandoned, and the entire pot is covered with suitable designs, such as floating lozenge panels and lattice patterns, without any break except, sometimes, a narrow zone round the rim.

Among these last two categories of beaker it may be useful to distinguish between beakers such as P63.089 - 092, P.63.114 - 116, and P63.126, in which a certain discipline of style and neatness of execution are allied to well fired fabrics,

often of a dark brown colour, and pots in which the two-banded scheme of decoration is less rigidly adhered to, or abandoned completely, and the technique becomes careless and untidy, as in P69.103, P63.104, P63.119, P63.094, and P69.096. The beakers with the typologically early characteristics might be contemporary with the first of these latter two groups, but the last type are set apart, not only by the apparent lateness and degeneracy of decoration, but by the appearance of their fabric, which tends to be lighter in colour, and softer than that of the others.

The implications of these differences in relation to the site as a whole are discussed elsewhere.

Finally, it may be noted that small numbers of Handled Beakers such as came from Hockwold sites 23, 63, 69 and 93, are found in most of the larger Long Necked Beaker domestic assemblages, as, for instance, those from Risby Warren, Chippenham, Figty Farm, Cottage Field and Gorsey Bigbury, and appear to be a normal component of such assemblages. Such handled vessels are more commonly decorated in the fine ware tradition, but a few have jabbed or finger nail rustication.

Long Necked Beaker Domestic Pottery Groups - General Discussion

David Clarke, in his thesis and published articles, insists, rightly, on the importance of the study of Beaker domestic pottery assemblages in any attempt to form a total picture of the development of Beaker pottery styles. The large corpus of funerary beakers must be the basis of Beaker typology, but only by reference to groups of domestic pottery, found in stratigraphical relationship, is it possible to check this typology fully, and to gain an unbiased idea of the styles and forms current at any one time.

There are two obstacles in the way of this ideal. The first is perhaps little more than a quibble, but is a point which Clarke apparently ignores, and which should be taken into account: It is that in very few instances is it possible to demonstrate conclusively that any large, domestic find is 'closed', and the site of one period, or that occupation was continuous or discontinuous. A few sites, such as Chippenham V, which consisted of a group of related hearths, sealed below a barrow of Early Bronze Age date, may fairly safely be assumed to be of one period, but on most sites the necessary stratigraphical detail either is not to be found, or has not been noticed in excavation. To assume that a find is of a single period because the pottery appears to be of roughly the same type, however reasonable this may seem in individual cases, would be to create a dangerously circular argument. The second, and more important, point, is the relative scarcity

of large domestic pottery assemblages. Only a handful of sites represent the two hundred years or so of the existence and continuous development of the Long Necked Beaker culture.

A question which further arises is: How far can the differences between any given domestic pottery assemblages¹ of roughly similar date be assumed to be of general, or even limited typological significance, and how far are they variations peculiar to the work of a few individuals only?

It is not difficult, when reviewing large numbers of neakers, to see the main differences which distinguish Long Necked Beaker assemblages of various regions and phases of development, and nearly all writers on the subject of beakers and the Beaker cultures, from Abercromby onward, have commented on aspects of these, before Clarke made his detailed analysis and reclassification. It is surprisingly difficult, however, to place any given Long Necked Beaker domestic assemblage in precise chronological or cultural relationship to any other, and this is not only because the evidence tends to be so fragmentary. Clarke's terms of classification refer, like any other typological system, to broad and arbitrary divisions, superimposed on a continuous and organic process of development. They represent the 'bare bones' of this process, such as can

¹. It should perhaps be made clear at this point in the discussion that we are here, in practice, concerned more with Beaker fine ware than with the rusticated pottery. This is because less is known about the latter, which is almost entirely domestic in use, found chiefly on domestic sites, and therefore, less common. No exhaustive study has yet been made of the type, but it is discussed more fully in Part IV of this thesis.

be abstracted by analysis of the total available material; they cannot cover, except in the most general way, any individual or baroque fancies of the potters of separate communities.

This is particularly true in relation to the later phases of development of Beaker pottery, chiefly that of the Long Necked, or Southern group, which are characterised by an increasing inventiveness, boldness and freedom in the adaptation and use of the basic motifs. It is most marked during the Late Southern, and into the Final Southern Beaker phases.

There can be no absolute answer to the problem, nor, indeed any very satisfactory one while the date is so limited, but it is a problem worth exploring. The Hockwold material provides a particularly good illustration of its nature.

The main typological differences observed in the Beaker pottery from the Hockwold sites seem real enough, even though their meaning, in terms of the duration of the occupation of the site, is in doubt. The matter is complicated by many minor variations in style which need not be of widespread significance at all. The repetition of certain motifs used in similar ways on a number of pots from the same site may isolate these as a group, in contrast to other groups, also from the same site characterised by other individual styles of decoration. It may not be too fanciful to suggest that, while the stamps and other details of decoration differ, P63.089 - 092 are by the same hand, or, at least, by hands mutually influenced; or

similarly, P63.108 - 109, or P63.114 and 115, or P93.004 and 005, P93.010 and 026, or P93.012 and 015.

The same observation is even more applicable to the pottery from Cottage Field, Wattisfield, Suffolk, which includes five almost identical beakers, two of them handled, which are decorated with an unbroken design of large, floating lozenge panels, covering the entire pot. All are incised, not comb impressed, (Fig.40:a,b). Amongst the pottery from America Farm, Newark, near Peterborough, several different beakers, decorated with metopic schemes of varying complexity but great basic similarity, seem unquestionably to be by the same hand, and contrast with the style of other beakers from the same site (Fig.36:a,b). From the site at Reffley Wood, Norfolk, come at least two beakers decorated with a similar lozenge chequer pattern, (Fig.43:b,f) and two others are decorated with large, reserved bar chevron patterns, done in an unusual stab-and-drag technique (Fig.43:e).

Similar factors could determine some of the differences between pottery of different sites. At Hockwold, the 'Oaks' site and Site 93 must be considered, on general typological grounds and in a cultural sense, to overlap. Whether the overlap is also chronological is uncertain. Given the larger typological similarities and differences, the two pottery assemblages are still consistently unlike in some respects, chiefly in the designs favoured. The profiles of the beakers are not dissimilar, but the rim cordons which are a distinctive feature of many of the beakers of Site 93 are rare on the beakers

of the 'Oaks' site. This could be a functional variation, but in this context it seems unlikely. Of the broad zone motifs, floating lozenge panels, and the various, more unusual, reserved designs which are common on the beakers of Site 93 are much rarer on the pottery of the 'Oaks' site. On the other hand, the rectangular, filled panel motif, and the large pendant triangles, both of which recur on groups of beakers from the 'Oaks' site, are not found among those of Site 93. Conversely, similarities may be apparent in the pottery from quite separate occupation floors, as between that from Sites 93 and 95. It is less easy to point out differences between the rusticated ware in any two pottery groups, although that from the unnumbered 'Beaker Floor' in Field 614/616 is distinctive enough. There may be some significance in the numbers of zoned, rusticated beakers from Site 93, as opposed to the relative scarcity of the type on the 'Oaks' site.

Long Necked beakers which can be classified as Developed Southern occur in some number on several sites, but notably at Chippenham Barrow V. Here, simple designs of narrow, alternating decorated and undecorated zones occur frequently (Leaf 1940 Figs. 18,19 & 20,23,24), so do more complex designs of narrow, alternating reserved and filled bar chevrons (Leaf 1940 Figs. 16,17), and broad bands of such designs as small, floating panels, covering the entire neck, above narrow, alternating zones on the body (Leaf 1940 Fig. 17,21). Many of these bear some resemblance to beakers from Gorsey Bigbury,

Somerset (Grimes 1938a Fig.12). A very specific parallel can be seen in a broken lozenge chequer pattern, present on sherds at both sites (Leaf 1940 Fig. 16:15; Grimes 1938a Fig.13:19). But the Gorsey Bigbury pottery as a whole, while bearing no motifs that are not common to Long Necked beakers of most phases and regions, has the characteristics which distinguish the Long Necked Beaker pottery of South West England and South Wales, as opposed to that of Eastern England; the predominance of the funnel necked form, and broad-zone reserved bar chevron and the saltire motifs (Grimes 1938a Figs. 12:6; 13:16,18; 14:25). In particular it is comparable to pottery from another domestic site in the region; a cave site, Bos Swallet, Burrington. The relative shortage and limited style of rusticated pottery from these sites, as compared with sites like Chippenham B, may be significant, although Gorsey Bigbury itself is not, strictly speaking, a true domestic site, and the finds from it may not be fully representative.

Developed Southern Beaker pottery from America Farm has features in common with that from the above sites, but it is not specifically comparable. The commonest of the simpler styles of decoration found here are alternating, cross hatched and undecorated zones. There is one beaker with decoration which, on the neck, matches another from Chippenham V, with narrow zones of spaced pinches, bordered by horizontal lines, and alternating with undecorated zones (Leaf 1940 Fig.19). There is another with a broad band of multiple, alternating

bar chevron decoration on the neck (Fig.36:f).

The typologically earliest pottery from the 'Oaks' site, Hockwold, is unlike any of these groups, although it has many of the formal attributes of a Developed Southern Beaker group. The narrow zones, here, tend to be clumped into two's and three's to form broader bands which cover most of the neck, and form two or three bands which alternate with undecorated zones of similar width on the body. The best example of this type is P63.022. Sometimes the narrow zones are closely spaced over the whole surface of the pot, and the undecorated zones have almost disappeared, as on P63.062, which has, otherwise, a slight resemblance to one from Chippenham V. (Leaf 1940 Fig. 20:23). The beaker P69.045 has the simple alternating, narrow zones characteristic of many of the pots from the Chippenham site, but no specific likeness is apparent.

A Among the domestic Beaker pottery classed as Late Southern Beaker, and this includes assemblages from Gorsey Bigbury, again Fengate, America Farm, and Fifty Farm, as well as Hockwold 'Oaks' and Site 93, the individual divergencies are greater. The general characteristics of the Late Southern beakers, the decoration divided into two broad bands, on neck and body respectively, and the motifs grown appropriately larger, or developed to fill the broad spaces, are all present; and designs based on floating lozenge or hexagonal panels, large triangles, broad-zone bar chevrons, and large metopic schemes are used widely, though by no means all universally.

The peculiarities and affinities of the Gorsey Bigbury and related groups have already been mentioned. Designs incorporating large, reserved bar chevrons are not so common on sites in Eastern England, but do occur from Fifty Farm (Leaf 1934 Pl.1) and America Farm. In both instances, single, reserved bar chevrons, defined by plain, filled triangles, cover the neck and body and the pot in two broad bands. Large triangles are a common motif, often in designs repeated on neck and body. There are many variations on this basic design, as can be seen on sherds from the Hockwold 'Oaks' site (P63.89 - 92), as compared with others from America Farm (Fig.36c:d). An unusual variation is found on Beaker sherds dredged from the River Wissey, near Stoke Ferry, Cambridgeshire: Large, filled, pendant triangles are split by a narrow, vertical, reserved bar, so as to form inverted mitre shapes.

Lozenge and floating lozenge panels are common motifs, as has been stated, but not equally common on all sites. They are rarely found on the Fifty Farm pottery, for instance, and are relatively common on that from Hockwold Site 93. There is usually less individual variation in the use of these, but P93.012 and 015, from Hockwold, with the repetition of a floating lozenge design in different form on neck and body respectively, are distinctive, and are unlike the floating lozenge patterns on the Fengate pottery, for example (Wyman-Abbott 1910 Fig.5). An unusual variation on the theme is found on P63.100, on which small, floating lozenge panels on

the neck have been incised with the finger nail, or with a crescent stamp.

Hexagon panels appear to be a motif used more often on typologically later pottery, and are rare in this context. There are at least two beakers from America Farm, however, whose decoration includes small, horizontally elongated, floating hexagonal panels.

Some of the features which distinguish the pottery from Hockwold Site 93 may be typologically late in respect of a Late Southern Beaker group. There are beakers with reserved designs, for instance, which are unusual, and possibly individual, and which are far more developed than the simple reserved lozenge panels which are found on beakers from Fengate (Wyman-Abbott 1910 Fig. 5).

Each of the above domestic pottery groups is characterised, as a group, by the dominance of some particular motif. In the second of the Hockwold 'Oaks' groups, it is the large triangle, and the rectangular filled triangle. On the beakers from Fifty Farm, it is the technique of excision, or, sometimes impression with a triangular stamp, to form small triangular pits, and false relief patterns (Leaf 1934 Fig. 3:18,19,20,21 23). This technique is known elsewhere, at Hockwold Site 93 (P93.019), for instance, and at Swarkston (Greenfield 1960 Fig. 10:43), but is generally rare. At Fifty Farm it is used on about seven different beakers. At America Farm, the distinctive motif is the style of metopic decoration already referred to (Fig.36:a,b), and at 'Sahara', Lakenheath, it

appears to be a form of saltire panel. (Briscoe 1948. Fig.10:a,c).

The definitive characteristics of Clarke's Final Southern Beaker type are biconical or bucket forms, and the absence of the zoning of decoration which, on earlier forms, had emphasised the demarcation between neck and body. The decoration, usually incised, consists of broad-zone motifs suited to an all over scheme, floating panel and lattice patterns in particular. In the domestic pottery assemblages classified by Clarke as Final Southern, beakers of this type are the extreme form. Profiles tend to be slack, but biconical and straight sided vessels are rare, and the break in decoration at the neck is more often retained than not, though the emphasis on this decreases. Variations in style become, on the whole, increasingly limited and the designs more carelessly executed, though as often comb impressed as incised.

The latest beakers of the Hockwold Oaks' group are of this phase. Some, such as P69.096, P63.109, and P63.110, retain a break in decoration at the shoulder, though a less pronounced one. Others, such as P63.094, and P63.108, are covered in an unbroken pattern of lattice or floating panel motifs. Large, hexagonal panel motifs become more common.

The two largest known Final Southern Beaker domestic sites are Reffley Wood, Norfolk, and Cottage Field, Suffolk, and there are many other sites which have produced pottery of this phase.

Between the pottery from these two sites mentioned there are still clear differences, despite the general, degenerate trend toward greater uniformity in style.

At Cottage Field, incised decoration is much more common than comb impressed, and by far the most common design consists of large, floating lozenge panels, covering the entire surface of the pot without a break. A separate, narrow zone below the rim is common, often above a very slightly raised cordon. There are two sherds with a decoration of filled rectangular panels, similar in a general way to those from Hockwold 'Oaks', and several sherds bearing indications that they came from pots which had a break in decoration at the neck. At least six of the beakers were handled.

Several of the 'floors' at Edingthorpe produced Final Southern Beaker sherds, including one which echoes the style of handled beakers from Cottage Field, with all-over decoration of large, floating lozenge panels. In general, however, these sites did not produce enough pottery to be useful for comparison.

The Reffley Wood material does not present as late an appearance, typologically, as that from Cottage Field, nor does it closely resemble the latest group of pottery from Hockwold 'Oaks'. Lozenge panel and floating panel decoration is common, particularly vertically elongated hexagonal panels, but a very common motif appears archaic in this context, being the large, reserved bar chevron, covering the neck. Where it is possible to see, there are usually at least traces of a

break in decoration at the neck, whatever the design. The beakers here are more often comb impressed than incised. This is a very varied group and, though none of the sherds is necessarily out of place in the context of a late Long Necked Beaker group, the circumstances of the finds leave open the possibility that not all the vessels represented are closely contemporary.

Many, if not most of these broad differences observed within the overall conservative style of the pottery from different, but very roughly contemporary sites must be the outcome of preferences of individuals or of the immediate groups, and of little import ultimately in the slow development of the pottery style over the whole region or country, as seen broadly by the typologist. Exact statistical analysis of such limited data would be highly unlikely to produce meaningful results, but if the general observation is valid, it is both a useful reminder of the fundamental complexity of the process of development of styles in pottery decoration, and a potential guide to the better understanding of Beaker settlements.

HOCKWOLD-CUM-WILTON: FLINTSSite 93

| <u>Type</u> | | <u>No.</u> |
|--|-------------------------------------|------------|
| 'Thumb' scraper: | Fig.29:7 | 1 |
| Scrapers; 1-1½in. across | Fig.29:4,5,6 | 42 |
| Scrapers 1¾-2½in. across | Fig.29:1,3,12 | 12 |
| Scrapers; on thin flakes; flat flaked edge | Fig.29:2 | 6 |
| Scrapers; on thin flakes; steep retouch | | 13 |
| Scrapers on irregular flakes: | | 3 |
| End scraper | Fig.29:10 | 1 |
| Hollow scraper | Fig.29:8 | 1 |
| Notched flake: | Fig.29:9 | 1 |
| Knives on flakes; single edged | Fig.29:11 Fig.30:1,4(?), 5,8. | 13 |
| Flakes with straight, bevelled, chisel-like edge: | Fig.30:2,3 | 2 |
| Awl | Fig.30:6 | 1 |
| 'Fabricator': | Fig.30:7 | 1 |
| Arrowheads: Triangular | | 1 |
| Barbed and Tanged | Fig.30:10 | 3 |
| Blade: | Fig.30:9 | 1 |
| Flakes with traces of secondary working: | | 14 |
| Flakes; unworked, mostly waste | | 72 |

| 'Oaks' Site | No. |
|---|--------------------------|
| 'Thumb' scrapers: | Fig.31:17,18 17 |
| Scrapers; 1-1½ in. across: | Fig.31:12,13,16, 19. 136 |
| Scrapers; on thin flakes; flat flaked edge: | Fig.32:20 13 |
| Scrapers on thin flakes; steep retouch: | Fig.31:14,15 4 |
| Scrapers on irregular flakes | 9 |
| Side scrapers: | Fig.31:7,11 2 |
| End scrapers: | 7 |
| Hollow scraper: | 1 |
| Notched flakes: | Fig.31:5 2 |
| Plano-convex knives: | Fig.31:1 2 |
| Oval knives; flat flaked along both edges: | Fig.31:3 3 |
| Knives on flakes; single edged | Fig.31:4,6,10 17 |
| Knife/end scraper: | Fig.31:2 1 |
| Triangular points, flat flaking on both faces: | Fig.32:16-19 4 |
| Roughly triangular points: | 3 |
| Flake; crude, trapezoidal, with retouched chisel edge: | 1 |
| Saws: | 2 |
| Awl: | Fig.31:8 1 |
| 'Fabricator': | 1 |
| Arrowheads: Leaf: | Fig.32:1-5,6(?), 7-9 9 |
| Barbed and Tanged; small, irregular | Fig.32:12,13 3 |

| <u>'Oaks' site (contd.)</u> | | | <u>No.</u> |
|---|----------------------------------|------------------|------------|
| Arrowheads: | Barbed and Tanged; large regular | Fig.32:14, 15 | 3 |
| | Barbed and Tanged; unfinished | Fig.32:11 | 1 |
| | Barbed and Tanged; broken: | Fig.32:10 | 2 |
| Blades: | | Fig.31:9 | 5 |
| Flakes with traces of secondary working or use marks: | | | 28 |
| Flakes; unworked, mostly waste: | | | 392 |
| Cores; pyramid: | | | 3 |
| " | small, prismatic: | | 1 |
| " | small, from pebble: | | 1 |

Discussion

The flints from the Hockwold sites are similar to those from almost any other Long Necked Beaker domestic site in the types and proportions represented. Characteristically, scrapers are the most common tool type, usually made on struck flakes of roughly circular or oval form and of varying thickness, between one and two inches across. Large scrapers, such as the one illustrated from Site 93, (Fig.30:a), are rare. The extremely small 'thumb' scrapers are commonly found, though not usually in great quantity. The large numbers found on the submerged 'Lyonesse surface', on the Essex coast, are sufficiently unusual to justify the postulation of a specialised industry (Hazzledine Warren et al. 1936 182).

The scarcity of carefully made and finished tools seems also to be a usual feature of Beaker flint assemblages as compared with those of other neolithic cultures. Knives are the most numerous single type, after scrapers, and these are usually oval or D shaped flakes, two inches or more in length, with a minimum of flat retouch down one edge (e.g. Fig. 32:d). Often, the 'retouch' has consisted of the detachment of tiny flakes of more or less regular size along the cutting edge, and is probably the accidental product of pressure during use (Fig. 32:b). More rarely, the knife is double edged, with flat flaking covering much of the upper face (Fig. 32:c). A poor example of the distinctive polished flint knives was found together with Long Necked Beaker and Food Vessel sherds as a surface find at Right Up Drove, Lakenheath. (Briscoe 1964 Fig. 2n.), and a polished discoidal knife with sherds of Final Southern Beaker on Site 11, Field 63, at Edington, but such finds are unusual.

The two implements with neatly worked, straight, chisel edges from Hockwold Site 93 (Fig. 31:b,c) appear to be an unusual type, and could be a specialised form of either scraper or knife. The roughly triangular points with flat flaked edges from the 'Oaks' site are a little puzzling also. Some (e.g. Fig. 33:r,s) could be projectile points of some kind and possibly not of the Beaker culture; others, knives (Fig. 33:t). Such tools are not unknown on other Beaker sites, at Edington, Field 64, Site 9, for instance, (Fig. 38:e,f) or at Fifty Farm (Leaf 1934 121 Fig. 2:13), and a set of three, similar, but better

finished triangular points were found, with the well known set of fine, barbed and tanged arrowleads, in Breach Farm Barrow, Glamorgan (Grimes 1938b 115, Fig.5:3,4,5).

Barbed and tanged arrowheads occur in small numbers on many Beaker domestic sites. As here, the small, irregular type and the larger, straight sided or ogival type with square or obliquely cut barbs (Fig.33:n, o) are often found on the same site. The latter variety, which recall the finely made set from Breach Farm Barrow, mentioned above, and which seem to be later in date than the former (Piggott S. 1963:77f), do not seem to have been found on any Wessex/Middle Rhine or AOC Bell beaker site.

It is to be expected that some of the flints from the Hockwold 'Oaks' site, and from other Beaker sites elsewhere, are to be associated with the remains of the earlier neolithic cultures also represented on these sites, and some types, such as the leaf arrowheads, are readily identifiable as intrusive in a normal Beaker assemblage. The less specialised tool types present more of a problem, however. Earlier neolithic scrapers are, in general, larger and have a steeper scraping edge than those associated with Beaker and later finds, but hardly any of the scrapers from Hockwold 'Oaks' can be isolated with certainty from the Beaker assemblage, or not in such a superficial survey as this.

The quantity of 'waste' flint seems to vary considerably from site to site, though this may be due, in part, to differing

degrees of care taken in the recovery of such evidence. Cores are rare at the Hockwold sites, as compared with the numbers from Chippenham V (Total: 16) or Fengate Pit 1 (Total: 20. Wyman-Abbott 1910 355), but there can be no doubt that flint working took place nearby, if not within the area of the occupation 'floors' excavated.

Most Beaker domestic flint industries give the impression that every possible scrap of flint brought on to the site was used and reused. Highly finished tools are rarely found in such a context, though small chips from polished implements attests their use. Presumably the flint from such factory products as axes was too valuable to be discarded, even when the tools were useless for their original purpose. Several axes, both polished and rough, were found at Edington, but usually as surface finds.

Tools made of stone other than flint are even rarer. A small, and very much weathered, stone axe was found at the perimeter of Hockwold Site 93, (Fig.34:h) and the butt end of another, not so weathered, near Site 61, in Field 613. The group, or groups, these belong to has not yet been determined. Another interesting item is the tip of a tongue shaped implement, elliptical in cross section, of smoothed, but faintly striated greenish grey slate (Fig.34:a). This is evidently the broken end of a 'sponge-finger stone' of the type discussed by Isobel Smith and Derek Simpson (Smith I.F. & D.D.A. Simpson 1966. 139).

BONE IMPLEMENTS

The few bone implements from Hockwold Site 93 (Fig. 34:e-g) are representative of all such finds, and more varied than most. Slender points, roughly circular in cross section, and smoothed and polished, such as the three illustrated (Fig.34:b-d) are occasionally found on other Beaker domestic sites. They are an unspecialised type, by no means exclusive to Beaker cultures, and are presumably pins and needles of varying purpose. At Gorsey Bigbury, two needles, complete with 'eyes' were found. The broader point from Hockwold Site 93 is evidently an awl or punch, perhaps for leather working (Fig.34:g).

The flat, polished 'spatula' (Fig.34:f) has parallels from Gorsey Bigbury, Lough Gur Site C and Archerfield, Gullane, and from a limited number of Beaker burials. These tools have been discussed by Smith and Simpson (Smith I.F. & Simpson 1966) and by Clarke in his thesis, and are most probably part of an archer's equipment, though the simplicity of the type leaves open the possibility of a wide range of uses. Clarke states them to be particularly characteristic of the Primary and Developed Southern Beaker groups (Clarke D.L. 1964. 527 f.).

BEAKER DOMESTIC SITES: FIRED CLAY LUMPS

A feature of Hockwold and many other Beaker domestic sites which requires comment is the presence of balls, or small irregular lumps of fired clay, often in large quantities. These clay lumps can be divided into two types.

The first, and by far the most common, is the small, irregular ball of clay, sometimes bearing finger or thumb prints. These are usually buff or reddish in colour, and, in texture, resemble the fabric of Beaker pottery, though often without grit or grog. These are normally found scattered on the site and in refuse pits, and it is reasonable to think that they have some connection with the manufacture of pottery, perhaps as the accidentally fired waste from this process. Direct evidence for such activity is scarce, but at Cottage Field, a pit containing sand and much clean, plastic clay, was observed in section. At Burnt Dune, Luce Sands, another pit, also filled with clean plastic clay, was found, together with fired clay lumps, on a site which produced neolithic and Beaker material. Occasionally, larger, brick-like lumps of fired clay are found, from which lumps have been torn while the clay was still pliable. One such came from one of the ditches at Windmill Hill, together with the more familiar, smaller lumps. The stratigraphical position of these finds suggests a specifically Beaker association. (Smith I.F. 1965a 82, 84).

The second type of fired clay waste comprises practically

the only concrete evidence for Beaker structures. On the Hockwold 'Oaks' site, some of the fired clay came in larger, more irregular pieces, of a light textured, biscuity fabric, buff in colour, without any grit or grog, and unlike any of the pottery fabric. One or two of these pieces bear traces of the impressions of stakes or rods, about $\frac{1}{2}$ in. in diameter. At Fifty Farm was found another piece of fired clay, bearing distinct impressions of parallel, circular stakes, 1 in. in diameter, and at Risby Warren, a considerable quantity of such fragments scattered round a central area of blackened sand, and among and in a series of adjacent pits. They bear, besides wattle impressions, the clear imprint of ferns and grasses (Riley 1957 42f.)

Such is the rather slender evidence for wattle and clay structures. Unfortunately, such burnt 'daub' has never been associated with stake hole settings which could be interpreted as huts.

HOCKWOLD-CUM-WILTON: ANIMAL BONESite 93

| <u>Species</u> | <u>No. of bones</u> |
|------------------------|-------------------------|
| Sheep/Goat | 142 |
| Ox | 51 |
| Pig | 20 |
| Red Deer | 6 |
| Roe Deer | 36 |
| Dog | 1 |
| Otter | 1 |
| unidentified fragments | 24 |

'Oaks' Site 63

| | |
|------------------------|----|
| Sheep/Goat | 21 |
| Ox | 76 |
| Pig | 5 |
| Red Deer | 4 |
| Roe Deer | 2 |
| unidentified fragments | 28 |

Discussion

The above is a breakdown, according to species, of the bones scattered abundantly in the occupation deposits of Hockwold Sites 93 and 63 and now in Norwich Castle Museum. For various reasons, it was not considered feasible to draw any conclusions regarding the numbers of animals represented, or their age at



death. It is not certain to what extent selection by the excavator had taken place before the bones reached the museum. According to his own account, he did not keep all that were found, owing to the problems of transporting them. There are few very large bones represented, and this fact and the absence of ribs in the collection in the museum are probably significant.

The bones from Site 93 may be taken as a more reliable group, in view of the circumstances of the find. A fair number of roe deer are indicated by the jaws present, apart from the relative frequency of the bones, and many of the sheep/goat remains are from young animals. One of the antlers has been cut, apparently by notching it all round and then breaking it, rather than by sawing.

The bones from the 'Oaks' Site 63 are more fragmentary, and of course, are not certainly of one period. The same species are represented here as from Site 93, but in different proportions.

Very few exact figures have been published in connection with animal bones from Beaker domestic sites, but those from the Hockwold sites accord, in most respects, with what is known from others. Domestic animals are represented chiefly by ox, sheep, goat, pig and occasionally, dog, horse being absent. Red and roe deer are usually present to indicate the part played by hunting in the economy. Usually, however, the most abundant remains by far are of domestic ox, with sheep/goat and pig represented in far less number, and in that order

of frequency. The preponderance of sheep/goat remains from Hockwold Site 93 is anomalous, and the figures are best regarded with doubt.

PART IIIBEAKER DOMESTIC SITES IN BRITAIN

Before we discuss the Beaker domestic sites of Britain in more detail, it may be useful to outline a few general points. It can be said at once that, with perhaps one exception, all truly domestic Beaker occupation sites known are unmarked by any visible earthworks or obvious preparation of the site. Where finds of Beaker domestic material are associated with earthworks, as in various 'causewayed camps', they do not represent the construction or primary occupation of the site.

The cultural and geographical distribution of the sites is that to be expected from the plotted distribution of non-domestic Beaker finds, but, since nearly all the known sites are of the European/All Over Corded Beaker or the East Anglian or Long Necked Beaker groups, this is evident chiefly as a southerly distribution of the East Anglian and Long Necked Beaker sites, with a marked concentration in the eastern half of England, and a northerly and largely coastal distribution of the European/All Over Corded group, the area of overlap being the Yorkshire Wolds. The reason for this cultural bias is not apparent: it could reflect changes in habits which have resulted, indirectly, in sites of one culture being preserved while those of another are not, or it could be purely a result of inadequate information. Any apparent difference in emphasis between the distribution of the known domestic sites and that of the funerary sites of

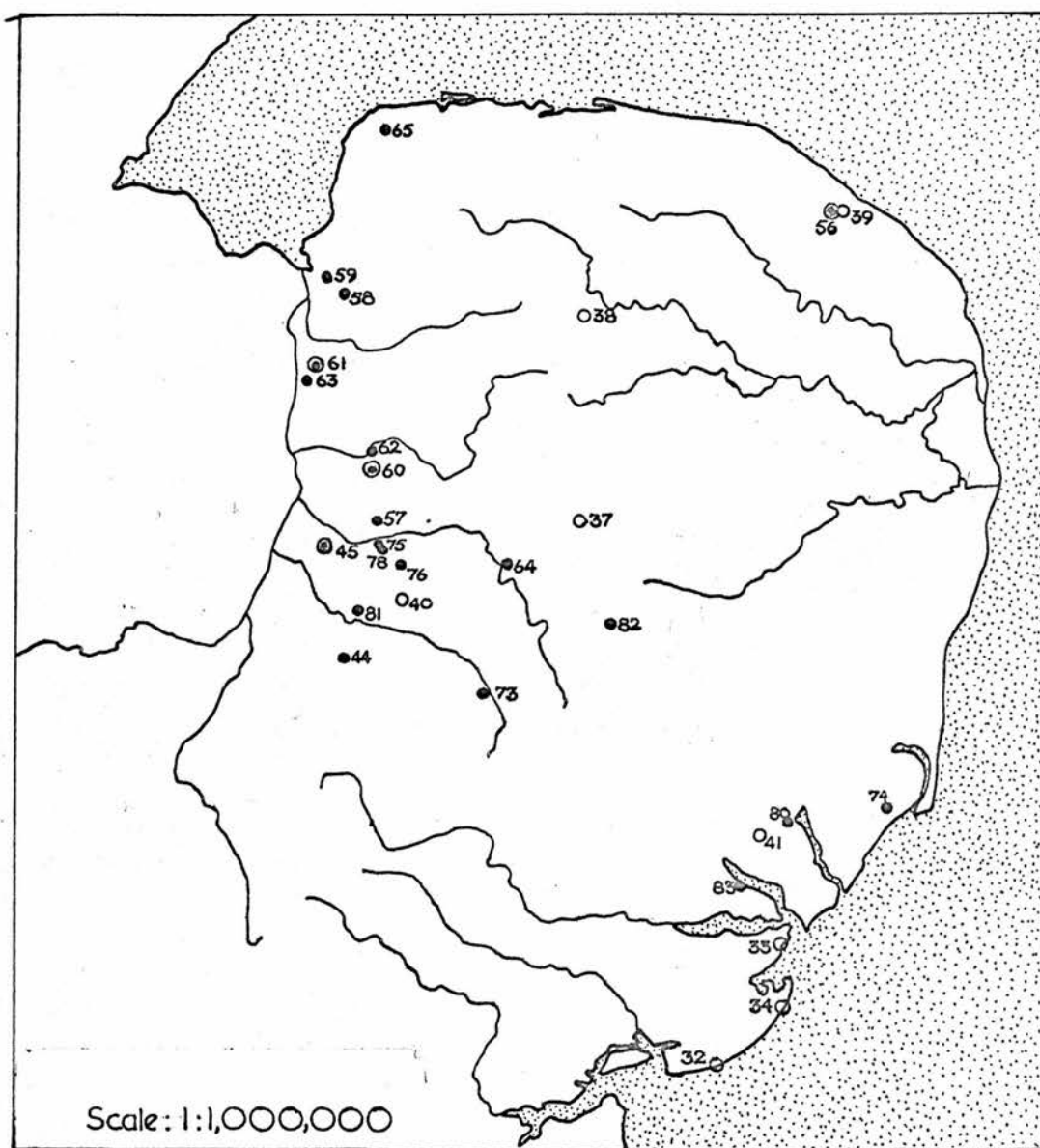
any one particular Beaker culture is almost certainly fortuitous, since the domestic sites are so few, relatively speaking, and the circumstances which led to their preservation so much a matter of hazard. The significant relationships of the different sites to natural and other features of the landscape will be discussed in connection with specific sites and regions.

As a supplement to this section a table of the known domestic sites and assemblages is included in the appendices, and this contains in outline the salient facts about each.

East Anglia

A discussion of the Beaker domestic sites of Britain on a regional basis involves arbitrary divisions which correspond, at best, only partially to realities of the settlement of prehistoric Britain by the people of the Beaker cultures. As arbitrary divisions they need some justification.

East Anglia is considered separately from and in greater detail than the rest of the British Isles partly because, as was stated in the introduction, it is a distinct geographical unit within which there happen to be known a particularly large number of productive Beaker domestic sites of various types, and partly because it is the immediate and most telling context in which to see the Hockwold sites. Fox and Rainbird Clarke have both discussed the geology of East Anglia in relation to prehistoric settlement of the region (Fox 1933; Clarke R.R. 1960. 13-27), and their observations need little



KEY

- Long Necked Beaker domestic sites
- East Anglian Beaker domestic sites
- ⊙ Domestic sites on which both Long Necked and East Anglian Beaker pottery occurs

Text fig 8: DISTRIBUTION OF BEAKER DOMESTIC SITES IN EAST ANGLIA

elaboration here. The main distribution of settlement at the time of the Beaker cultures followed an inland belt of light soils over chalk, including the Chalk Downland region in east Cambridgeshire, the Breck-Fen region in Cambridgeshire and south west Norfolk, the Breckland in north west Suffolk and south west Norfolk, the Greensand Belt in north west Norfolk, and a coastal belt, largely following the coastal sand and gravel soils, including the Good Sand and Loam regions of Norfolk and the Sandling region in east Suffolk. The centre regions are largely covered by heavy boulder clay soils and would have been less suitable for occupation, though access was possible via river valleys.

The distribution of Beaker domestic sites follows, in simplified fashion, that of the distribution of funerary finds. The greatest concentration is along the inland belt of the Breck Fen region, the Brecklands and the Greensand belt, and there is a lesser concentration in the Sandlings region.

The Fen Edge Sites

The Hockwold sites are among the remarkable group strung along the eastern edge of the Fens, east of the River Ouse; a group which includes sites at Reffley Wood, near Kings Lynn, Methwold, Shippea Hill, Lakenheath, Mildenhall and Chippenham. Not all, by any means, are closely similar to the Hockwold sites, although several, including those at Methwold, Shippea Hill, Mildenhall, and most of the sites around Lakenheath, are

in the same Breck Fen region and situated on sand hills in the peat. Material dredged from the River Wissey probably originated on a similar site. To the north, the Reffley Wood site is on light, poor soil in the Good Sand region, and finds from Gravel diggings at Runcton Holme and Stowbridge in the same region are presumed to be of domestic material. There are several sites on the very edge of the slightly higher ground which marks the eastern edge of the Fens and the beginning of the Breckland and Chalk Downland regions. Such are the 'Sahara' site at Maids Cross Hill, Lakenheath, and another at Eriswell, both of which are on sandy heathlands on the edge of the Breckland region, and the Chippenham barrows site, which is just within the Chalk Downland.

All these sites are on light, poor soils, and nearly all near obvious sources of water, but the occupation would appear from this record to be concentrated chiefly in the peat fen, while few sites are known from the apparently very suitable regions of the Breckland and the Good Sand region to the east of the Greensand Belt and north of the Breckland. A glance at the distribution of Beaker finds in aggregate, such as is illustrated by Rainbird Clarke (Clarke R.R. 1960 64, Fig. 15), or at the distribution of barbed and tanged arrowheads quickly correct this impression. The known Beaker domestic sites in this group are all in such a position as to have been protected from ploughing, at least until recent years, and it is to this fact that we owe their preservation. The sites in the Fens have all been under peat

and, thanks to the vigilance of several observers in the area, were recorded before the plough destroyed them. The Chippenham and Reffley Wood sites were partially preserved under barrows; a solitary remnant of Beaker domestic material was preserved in the Goodsand Region at Thornam, under the rampart of an earthwork of the 1st. century A.D.; and the relatively few sites known in the Brecklands were recorded on unploughed land. It must be assumed that most of the domestic sites are now marked only by surface scatters of worked flint, the most durable material from them.

Nearly all these sites produced Long Necked Beaker material only, or, occasionally a mixture of Long Necked, East Anglian and European/All Over Corded Beaker, as at Methwold and Shippea Hill. One, at Foxhole Heath, Eriswell, produced East Anglian Beaker alone, but this is a very small collection. Judging by the pottery, none of the sites, with the possible, rather doubtful exception of Joist Fen, Lakenheath, is of the earliest phase of the Long Necked Beaker culture, and most are of the Developed, Late, and Final Southern groups. The fact that the vast majority of material found here is Long Necked Beaker may be significant and betoken a long period of occupation, or a comparatively dense population in comparison with other Beaker cultures.

On many of the sites no features are recorded other than the scatter of pottery and flint, and on none were there recorded features any more substantial or informative than those at Hockwold. At Chippenham V the site, as preserved,

consisted of a series of adjacent and overlapping hearths of irregular size and shape. The area of occupation evidently extended far beyond the limits of the barrow, as a scatter of similar pottery and other finds was noted below Barrow I of the same group. At Reffley Wood, the site was marked chiefly by surface scatter, and was much disturbed by rabbits and by the planting of conifers. There was one conical pit filled with blackened sand and charcoal containing sherds, and there was a small heap or concentration of fire crackled flints, or 'pot boilers' nearby, also containing a few sherds. There were, in addition, a number of hearths but most are recorded as being associated with cremations in the barrow. The 'Sahara' site consisted of a series of hearths pits and depressions filled with discoloured soil, and some of these seem to have been associated with Beaker pottery although most belong to a later, Iron Age occupation of the same site. At Rabbit Hill, Lakenheath, there was a single, small, conical pit which contained discoloured sand and over 200 sherds. At Fifty Farm, Mildenhall, no features were noted other than the greyish layer of discoloured sand from which the finds came. The other principal finds were of surface material only, though at Methwold the quantity of material and the concentrations of 'pot boilers' and lumps of fired clay which first drew attention to the site indicate a settlement of some size and importance. The pits on all these sites are usually small, the hearths do not seem to have been prepared or built, and the occupation 'floors' seem to be

of the same character as those at Hockwold. No essential differences can be discerned between the sites in the fen and the sites on higher ground here.

Despite the general shortage of illuminating features, many of the sites produced material in quantities similar to the Hockwold sites. This is particularly true of Fifty Farm and Reffley Wood, but, in proportion to the area excavated, Chippenham V and some of the Lakenham sites were also very productive. As at Hockwold, there seems never to be any sign of internal stratigraphy, and there are rarely clear indications of the duration of the occupation. In almost all instances the Long Necked Beaker pottery must be assumed in all probability to be of one period, though sometimes only for lack of clear indications to the contrary. On a few sites, such as Methwold, the presence of European/All Over Corded, East Anglian, and Long Necked Beakers suggests strongly that these are traces of more than one occupation, as well as of more than one culture. Sites such as Chippenham and Reffley Wood could be the remnants of larger complexes of sites on the scale of that around Hockwold. In no area is the profusion of recorded sites and finds as dense as the latter, but the Hockwold sites themselves are part of a larger cluster comprising Stoke Ferry, Methwold, the Lakenheath sites, Fifty Farm, Shippea Hill, and Chippenham, all within an area 15 miles across. It is clear too, from the accounts of people living and working in the area, that many even the more spectacular finds of prehistoric material made

there are never reported, and that the sites recorded, which represent the activity of a very few observers, may not be fully representative in their distribution. It should be added that the pottery from each of the different sites of this cluster has no more than a general cultural similarity to that of any other.

The Sandlings

The second distinct group, that on the south east coast, is around Ipswich, in the Suffolk Sandlings region, and is quite separate, culturally and geographically, from the sites of the submerged surfaces of the Essex coast across the Stour estuary. The total number of sites is considerably less than in the Fen edge region, and the quantity of material from them is also less, but this is almost certainly due largely to less favourable circumstances for the preservation of such sites in the area, and the picture they present is to some extent counterbalanced by a distribution map of all Beaker pottery finds.

The sites, which include Butley, Martlesham, Wolverstone and Great Bealings, are on light soils, often sandy heathland, or land which has never been under continuous cultivation, and are sometimes preserved under barrows, as at Martlesham and Brightwell Heath. They differ little in detail from those of the Fen edge group already discussed. Most are of the Long Necked Beaker culture, and of a late phase within it, but

the one at Great Bealings produced only East Anglian and Barbed Wire Beaker pottery, though with much material of other neolithic cultures.

The largest collection of Beaker domestic material in this group is from Martlesham Plantation. Some of it was sealed below a barrow, and near, but not directly associated with patches of discoloured sand and a mass of charcoal which was probably a hearth, but more from a site nearby which consisted of at least four circular, bowl shaped hearths, or pits in the sand, each approximately 3ft. across and 2ft. deep and containing sherds, burnt flint and charcoal. The site was discovered and partially excavated during the digging of trenches for water pipes, on land which had never been under cultivation except in 1900, when it was ploughed in order to plant trees. The subsoil here, against which the pits showed, was pure sand, at a depth of 12-18in. below dark brown sand. The pottery from the pits consisted chiefly of rusticated sherds and can be classified, as a whole, as Final Southern. Traces of Beaker domestic material below at least one of the barrows on Brightwell Heath, in the same neighbourhood, suggest a possible extensive settlement of the immediate area.

The site at Neutral Farm, Butley, also produced Late and Final Southern Beaker sherds, but in smaller quantities, it was discovered as a result of surface finds in plough soil, and consisted of a typical 'floor' and hearth, without any trace of structure. A complete, large zoned rusticated beaker was found in the same parish many years ago, apparently in isolation.

The fine collection of East Anglian Beaker pottery from 'The Rookery', Great Bealings, was found with a slightly lesser quantity of other neolithic material, specifically sherds of plain, heavily gritted ware from undecorated vessels of Mildenhall type, and sherds of about five Grooved Ware vessels. Unfortunately, little is recorded about the site itself, and the opportunity for possibly valuable observation of the relationship of the various cultures represented there has been lost. All that is known is that the finds are unquestionably domestic in character, and that they all came from a mound. Whether the mound was natural or artificial is not clear. One interesting observation which can be made, however, concerns the flint collection from the site, which is noticeably more varied than is usual on a purely Beaker site. It includes a large number of finely made leaf arrowheads, though no petit tranchet derivatives, and a large number of scrapers, of which a high proportion of steep retouch in contrast to the shallower flaking found on the rest and familiar on Beaker sites. There are even a few microlithic points. There is ample evidence in the number of flakes and cores represented for flint working on the site, and the large number of small struck blades is interesting in contrast to the usual Beaker industries. Among the presumed Beaker types present are several barbed and tanged arrowheads, mostly of the larger, more regularly formed type.

The sites in this group as a whole differ from the Fen edge group only in the almost unvarying typological lateness of the Long Necked Beaker pottery from them. Occupation of

suitable areas could have equalled in density that of the Fen edge. The information available is limited by the various factors already enumerated, and hints at greater possibilities.

Edingthorpe

Perhaps the most important of the miscellaneous sites and groups of sites scattered over central and north east Anglia are those on Bacton Wood Mill Farm, Edingthorpe, and they deserve consideration at some length. They are comparable to the Hockwold complex in scale, though not, apparently, quite as productive of finds.

The sites are scattered more or less thickly over an area of 150 acres within the so called Loam region, near the north east coast of Norfolk. The relief is low, but with many low, hummocky hills and small valleys. The valleys have clay soils with wide spreads of alluvium, but the hill tops are sandy with gravel patches, and were evidently heathland at one time, though now under cultivation. The hilltops themselves are well drained, but several springs emerge on the slopes.

Finds of bronzes and flints have been noted here over a fairly long period, but deep ploughing in 1948 led to the discovery of large numbers of hearths of uncertain or widely differing dates, and a number of these were excavated in the years following. Generally speaking, the hearths and floors which produced prehistoric material are on the dry, light soils

of the hill tops, but some hearths associated with lumps of fired clay were found on or near clay deposits, suggesting pottery manufacture on the site, and large deposits of 'pot boilers' were found around many of the springs. This latter phenomenon is of interest in connection with similar sites in Norfolk, at Hoe and Eccles and elsewhere, and will be discussed further in connection with these sites.

Beaker pottery, chiefly Long Necked, but including some East Anglian, was found on fifteen of the sites, a few 'Western' neolithic sherds on three, Mortlake ware on one, and Grooved Ware on two. Some of the 'Western' neolithic sherds came from hearths which produced nothing else, the rest seemed to be residual on Beaker sites: the traces of non-Beaker occupation are not plentiful, nor is their relationship or lack of relationship to the Beaker occupation particularly clear. Perhaps three sites produced Food Vessel or Bronze Age pottery.

The sites were of various kinds. There were pits measuring between 1ft. diameter and 6ft. x 3ft., and between 3in. and 3ft. in depth below the plough soil, containing humic material with flecks of charcoal, pot boilers, flint chips, sherds, lumps of fired clay and charred hazel nut shells, all without any sign of stratification; there were large, relatively shallow, irregularly shaped pits, usually about 12ft. x 8ft., and not associated with any sign of a structure; and there were 'floors' of roughly the kind found at Hockwold. Both the larger pits and the 'floors' were often

near or associated with hearths consisting of ash-filled hollows scooped in the ground.

The larger pits were interpreted by the excavator, Mr J.E. Turner, as hut sites, which brings up the vexed question of 'pit dwellings'. These hollows could certainly not have been lived in comfortably: they were very irregular in depth, tending to have a shallow 'flange' and to dip steeply at one end. The fill is stated to have been similar to that found in the smaller pits, with the difference that the sherds contained in it were usually more abraded, and that the fill was always impacted to a hard, solid texture. The best recorded of this type are two excavated by Mr G. Larwood in 1951 - Site I O.S. Field 64. These formed a complex with two hearths, and were 7½ft. apart and not on the same alignment. One of the hearths was between them, and the other was cut into the fill of one of the pits. The pits were irregular in outline, though roughly oval and measured 11ft x 8ft. and 11ft. x 6ft., with a maximum depth of 4ft., and in section they appeared as shallow, irregularly conical scoops in the sand. Very few finds were recovered from them, but such as there were included Long Necked Beaker pottery and flints. Between them, across the north end of one and the outthern edge of the other, was laid a line of 11 large flint nodules. Some of these lay on or in the fill of the hollows, just beyond the edge, but could have fallen or been kicked there: they could very well have been in position when the hollows were open. Such flints do not occur naturally on the

immediate site, but could have been brought from nearby.

Mr Turner explains the difficulties in the way of his theory by saying that such hollows are the remnants left by the plough of drainage pits below tents or huts, and that they may originally have been covered with some kind of level floor. This would be difficult to prove or disprove: any post holes to suggest the presence of standing structures could have been destroyed by the plough taking off the surface of the subsoil, and their absence on the sites as excavated is not necessarily meaningful. The line of flints which might be for holding down a tent cover or light roof is not obviously connected with either of the two pits, even if it is contemporary with them. It is not clear from the account whether it was the bottom of these hollows or the top of the fill which was usually impacted hard: the former circumstance would suggest that the pits remained open for some time after having been dug.

A 'floor' of a more familiar type is represented by Site 11B in O.S. Field 63. This consisted of an area at least 30ft. across with a black occupation deposit and two hearths. One of these was roughly in the centre of the area and, leading up to it on the north east side, had a clearly defined, trampled path. A smaller hearth lay about 7ft. south east of the first and at a somewhat higher level. Sherds were scattered over this area, particularly on the south side, but the quantity of material is much smaller than from any of the Hockwold sites. A series of small pits lay in an

are south west of the floor, and the finds from the whole complex amount to sherds of about twenty pots, both fine and rusticated, of Final Southern type, and many flints, including flint waste, scrapers, a broken polished axe, and a polished discoidal knife. This constitutes the biggest collection of material from any single site in the Edington group. The total number of hearths noted after ploughing in this area runs into hundreds, but most of these produced no material and were not further investigated, or were of the 11th or 12th centuries A.D.

The scale and character of the Edington sites are comparable to those of Hockwold. Most of the pottery is Late and Final Southern Beaker, and tends to differ in appearance from each individual site. Sherds of European and East Anglian beakers do occur, and East Anglian Beaker sherds predominate on a few sites, though never, apparently, to the exclusion of all Long Necked Beaker sherds. It is not clear, however, whether this is a true stratigraphical association, perhaps of residual and later material, or the result of disturbance by the plough. The sites are scattered in a haphazard way without any distinct grouping in relation to any one culture or possible phase of occupation.

'Pot Boiler' Sites

Two groups of finds, at Hoe and at Overa Heath, Eccles in the Breckland and Mid Norfolk regions respectively, are of interest because they are in many ways unlike the usual Beaker

domestic site. They both consist of large deposits of fire crackled flints, or 'pot boilers', and other burnt material, sometimes several inches deep and covering a wide area. Sherds of East Anglian beakers were found in the deposits at both, and, at Overa Heath, flints also, including a barbed and tanged arrowhead. It will be recalled that deposits of 'pot boilers' were found at Edingthorpe, also, and there are similar sites at Buckenham Tofts, Swangey Fen, near Attleborough, and Wilby Warren, none of which produced any datable material other than a few flints from Buckenham Tofts of a type consistent with late neolithic or early bronze age cultures. At the latter site there were seven deposits wholly or partially excavated, the largest over 40ft. across and 2ft. deep, including at least one hearth pit lined with flint nodules and filled with charcoal and burnt material.

All these sites, except the ones at Hoe and Edingthorpe, are within 10 miles of one another, and all are closely associated with water. At Hoe the deposits were on either side a small tributary of the Wensum; at Overa Heath they were associated with a series of natural, shallow, water filled pits, some of which appeared to have been artificially banked up; at Edingthorpe heaps of 'pot boilers' occurred over the whole area, but the thick deposits were beside springs; at Buckenham Tofts they were on the slopes of hummocks between channels cut by a series of small springs.

Fire crackled flints are often scattered around hearths on Beaker sites, but deposits of this size and nature are

something apart. They are also distinguished from the occupation 'floors' by the scarcity of associated finds. Miss Layard, in her report on the Buckenham Tofts site, discusses the practice of cooking by means of heated stones and concludes that the deposits represented '... a permanent kitchen of large size, or something in the nature of a communal kitchen' (Layard 1922. 487). The almost total absence of food debris in the form of animal bone could be due in this case to soil conditions inimical to its preservation. The proximity of such sites to the occupation 'floors' and hearths at Edington is of particular interest in the light of this interpretation, but cooking is not the only activity that such sites might represent, since the evidence simply suggests the heating of water, either on a large scale or over a long period.

High Suffolk

Although the distribution of Beaker finds in East Anglia is largely and conspicuously confined to areas with light, rather poor, well drained soil, there are a few within the region of heavy boulder clay soils which cover most of Suffolk. Most of the latter are confined to river gravels, as is the domestic site at Creeting St. Mary, near Needham Market and above the river Gipping. The exception is the Cottage Field site, Wattisfield, which is on very heavy clay soil which must at one time have been heavily wooded and is still difficult to work.

The site at Creeting St. Mary produced chiefly Grooved Ware and flints of a type normally associated with Grooved Ware, but there was also a small quantity of nondescript sherds of Beaker pottery. The site consisted of a complex of scooped out, bowl shaped hearth pits, about 3ft. in diameter and 1ft. deep, the hearths being clustered in groups, and the groups about 10ft. apart. A minor feature of interest was the presence of burnt pieces of quartzite in some of them, as in the hearth of Site 63, Hockwold. Five or six hearths seem to have produced Beaker material only, and Beaker sherds were recorded in the same hearths as Grooved Ware, though which, if either, was the residual material is not clear.

The Cottage Field site is unusual in other respects than its location. The soil is heavy clay with small patches of sand, and it overlies chalk. The surface indications of the site were the usual spread of flints, covering the whole field, and black patches showing in the plough. Subsequent excavation revealed a deep shaft in the chalk, and sherds were found in the fill of this and at the bottom. This and a similar shaft in Calke Wood, about 200 yds. away, are now considered to be natural formations of comparatively recent date (Inf. N. Smedley). The Beaker finds in them are from a site above the shaft, and represent material collapsed or percolated into it. The stratification of the upper 'fill' shows a steep settling of what appears to be an occupation layer into the mouth of the shaft. For the rest, the site appears to have consisted of the usual black occupation layer

containing sherds, flints and charcoal. The amount of material is large, though much of it consists of small, non-descript sherds. The pottery is Final Southern Beaker and is consistent with a single period of occupation.

The only other feature noted in the area excavated was a pit 3ft. 9in. deep containing clean, plastic clay. It appeared to cut through the occupation layer, but the top had been removed by the plough. A number of irregular lumps of fired clay, possibly potters' waste, were also found, and the pit may have some connection with the manufacture of pottery. The clay in the field itself is unsuitable for the purpose; but that in Calke Wood is softer and micaceous.

The Essex Coast

Finally, the submerged sites on the Essex coast, at Clacton, Dovercourt, and Walton-on-the-Naze, are set somewhat apart from the rest of East Anglia by reason of their geographical position, the accident of their preservation and, perhaps, the near monopoly of Barbed Wire and East Anglian Beaker among the Beaker material from them. They have been published and discussed in some detail, (Hazzledine Warren 1912; et. al. 1936; Smith I.F. 1955), so there is little to do here but pick out a few salient features.

The sites date from a time only just before the marine transgression and were evidently liable to partial flooding at times. The fact that they are submerged has ensured a

very extensive preservation of the finds in a sealed deposit, even more complete than in the Fens. Moreover, it has enabled a much more comprehensive survey of the complexes of individual sites than has been possible elsewhere.

There is a widespread scatter of flints and other material over the surface and the sites yielded much material, though perhaps not as much in relation to their area as the Long Necked Beaker sites of the Fen edge. The specific features are of the usual type, and include hearths, small pits approximately 3ft. in diameter and 2ft. deep filled with burnt material, and, at Mill Bay, Dovercourt, and Stone Point, Walton-on-the-Naze, 'floors' consisting of a concentrated accumulation of flints, sherds, fragments of burnt clay, 'pot boilers' and charcoal and about 30ft. across. At Stone Point were found remains of particular interest, though not certainly of the Beaker culture, in the form of wattles of interlaced small boughs. These could have been part of light structures such as windbreaks.

Windmill Hill and Grooved Ware cultures are represented also, and here, the relationship, or rather lack of it, between sites of the different cultures is far more clear than on any site hitherto mentioned. The same types of site as produce Beaker pottery, the pits, hearths and 'floors', also produce Windmill Hill and Grooved Ware, but the three are quite distinct. At Lion Point, two sites produced Windmill Hill ware exclusively, and one Grooved Ware, all in the same area as the Beaker site. At Dovercourt a floor similar to the

Beaker one and two cooking holes all yielded Windmill Hill pottery only.

There is no apparent vertical stratigraphy within any of these sites, but Hazzledine Warren (Hazzledine Warren 1912) claimed that the flints and pottery collected overall came from two separate layers, and that the two groups of flint so obtained exhibited different degrees of patination, and the two groups of pottery were of different types. The second group, as he describes it, contained Beaker rusticated sherds, and the first plain coarse ware. The flints of the first group appear generally earlier than those of the second. The former include leaf shaped arrowheads, many of them rather crude, triangular points, petit tranche derivatives of the chisel type (Clark's types C-D), and the smaller and more irregular type of barbed and tanged arrowhead; the latter include polished stone and flint axes in much greater number and variety, perforated stone axe hammers, numerous very finely made leaf shaped arrowheads, barbed and tanged arrowheads, mostly of the larger and more regular type, and a few oblique petit tranche derivatives (Clark's type D & G). There are also a few microliths. Scrapers are, as usual, the most common type in both groups, but the small 'thumb' scrapers are unusually common. Both groups, judging by the presence of barbed and tanged arrowheads, and by other indications, belong within the period of the Beaker cultures. Perhaps the earlier group is to be identified partially with

the Barbed Wire Beaker occupation, this being the earliest Beaker type represented here, and the later with the East Anglian Beaker, but this is largely conjecture.

Conclusions

The pattern of Beaker settlement in East Anglia is remarkably consistent in a variety of different locations. The division between East Anglian Beakers in the southeast coastal region and Long Necked Beakers in the north west belt of the Fen edge and Breckland is not as marked as perhaps Clark once suggested (Clark J.G.D. 1931a 420), though the slight shift in emphasis is no less significant or real. The character of the sites themselves varies far more in the different circumstances which have contributed to their preservation than in their individual features. All sites, whether small or large, well or poorly preserved, and of whichever Beaker culture are, to all appearances of a similar type. They are random in plan, without traces of any substantial structure, but with pits of various sizes, hearths which are, at best, no more than scooped out hollows, and roughly circular 'floors' 20-30ft. across and apparently open to the sky. Beaker domestic sites often coincide with middle neolithic, Peterborough, or Grooved Ware sites, and the features of all look to be the same.

The people of the Beaker cultures, as of all other neolithic and early bronze age cultures, favoured lighter, well drained, and therefore less heavily wooded soils for

settlement, as has long been realised, and this is clearly reflected in the distribution pattern for East Anglia. From this, indeed, it would even appear that the very poorest soils were preferred, and though it is precisely on such soils, which are often uncultivated heathland still, that conditions are most suitable for survival of the evidence, the distribution of the flint types, as the most durable testimony, does tend to confirm the same picture.

It would be difficult to guess at the density of population represented by these sites, for together they must represent 200-300 years of occupation, but it was probably even over all the more suitable areas such as the Brecklands, the Sandlings, and possibly even the Good Sand region.

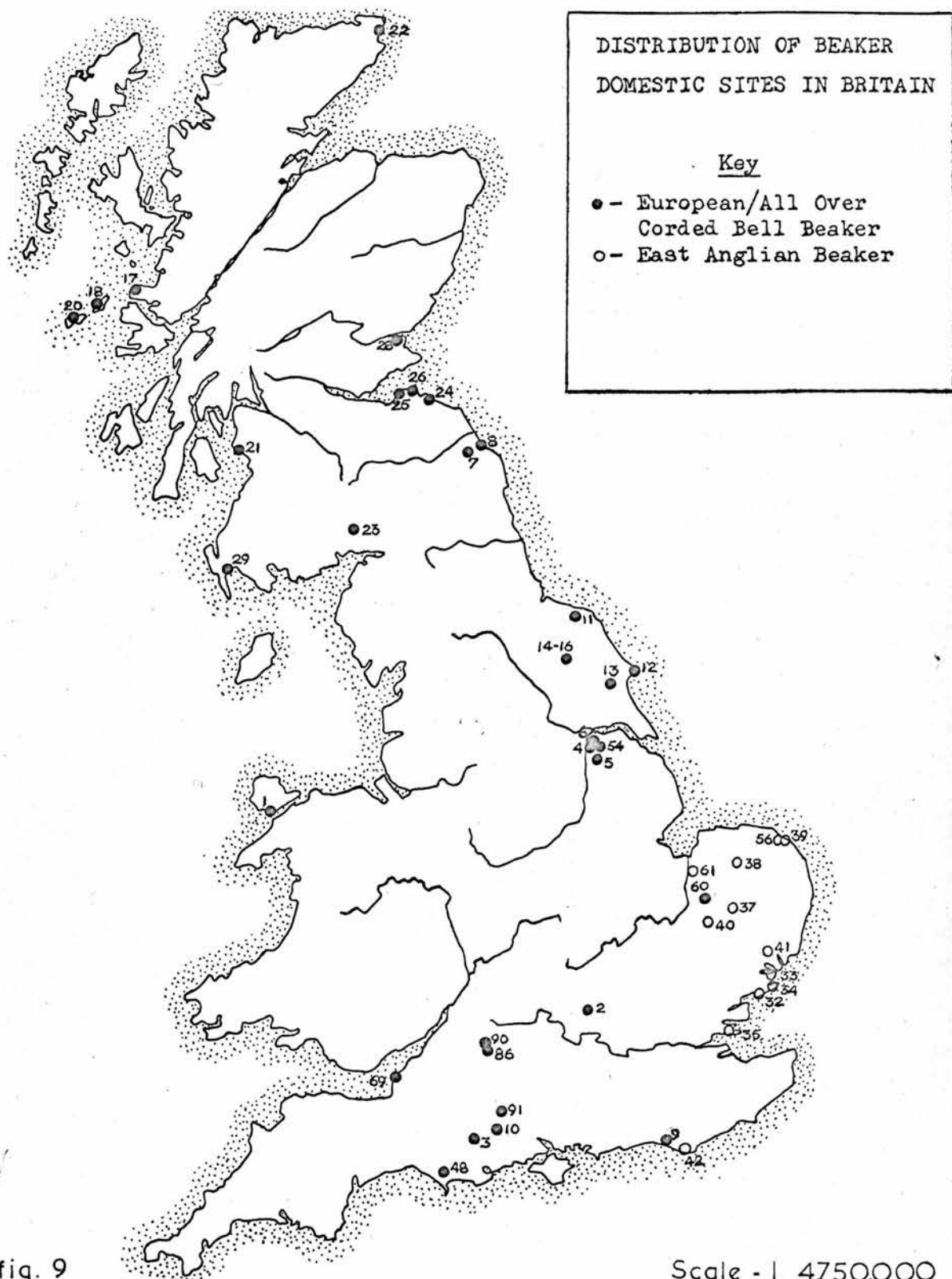
THE REST OF THE BRITISH ISLES

The geographical distribution pattern of Beaker domestic sites in Britain as a whole and the bias therein have been outlined already. The term 'Southern Britain in this context includes all sites south of the Humber and all Long Necked Beakers north of it in the Yorkshire Wolds, and the term 'Northern Britain' all European/All Over Corded Bell Beaker and Short Necked Beaker sites north of the Humber. The distinction corresponds roughly to what is generally accepted to be a cultural reality. Sites in Ireland are considered separately since they do not fit comfortably into either group.

Southern Britain

With very few exceptions the Beaker domestic sites of Southern Britain differ little in basic character from the range known in East Anglia. They of course cover a greater variety of geological regions, although they usually coincide with light soils, whether on chalk, limestone or gravels, such as would always have been dry and free of heavy woodland cover, and there are obvious concentrations in the Mendip region, on the Downs and on the sand on limestone regions of north west Lincolnshire. It is possible to consider them in terms of vague geographical and cultural groups, though these cannot be defined very strictly.

Sites other than those of the Long Necked Beaker culture are relatively few, and most of them produced European/All



Text fig. 9

Scale - 1 4750,000

Over Corded Bell Beaker pottery. Their distribution does not differ significantly from that of the Long Necked Beaker sites and, indeed, many produced material of both cultures. It is somewhat remarkable that even in the Wessex region which was the centre of distribution of the Wessex/Middle Rhine Beaker culture, and where a comparatively large number of Beaker domestic sites are known, there is hardly any definite trace of domestic occupation by that culture.

Brean Down site, in Somerset, is useful and almost unique in that it provides a clear stratigraphical relationship between occupation layers of the European/All Over Corded Bell Beaker and the Long Necked Beaker cultures. These layers are in the sand talus at the foot of Limestone cliffs and contain no features other than the occupation debris itself, which consists of sherds, flints, animal bone, and sometimes a scatter of charcoal. Long Necked Beaker sherds are well stratified in a separate layer above that, which contains European/All Over Corded Bell Beaker sherds, and which is partly separated from it by a more or less sterile sand layer.

On the Wiltshire downs two sites which seem representative of the general type, and which produced European/and All Over Corded Bell Beaker sherds, have been excavated at Downton and Easton Down respectively. The former occupies a natural hollow on a gravelly soil, and is marked chiefly by a scatter of over 200 sherds and other finds in an area measuring approximately 50ft. x 30ft. This is centred around and over a roughly L shaped setting of post and stake holes of

greatly varying size, widely spaced across about 40ft. There are also five shallow depressions or pits in a roughly rectangular formation, of which three are on the same line as the post holes. One, it is suggested, may have been a drainage ditch (Rahtz 1962. 127); another contained a hearth, the lining of which sealed what may have been a post hole. It does not seem as if a roofed structure formed a part of this complex at any time. The site is of further interest because material from it is found in rare stratigraphical relationship to Ebbsfleet, Mortlake and Fengate ware on an adjacent site. The two sites are sufficiently close for material from each to be found on the other, but the main concentration of Beaker sherds is quite distinct in area from that of the Peterborough sherds, and on the neolithic site Beaker sherds were found mostly above the Peterborough sherds. The length of time which elapsed between the two occupations is not, of course, apparent.

Finds of European and All Over Corded Beaker material sealed beneath barrows at Crichel Down, Tarrant Launceston, and at Avebury, in the same region, are probably the remnants of similar sites, though the traces preserved were relatively small. At Crichel Down sherds of several different pots came from a small circular pit cut by the barrow ditch, as well as from the material of the mound itself; at Avebury G55 the barrow covered a cluster of small pits which contained both European/All Over Corded Beaker and Long Necked Beaker sherds, representing about six of the former

and 17 of the latter, as well as other normal occupation debris. Similar material was found in the plough soil over an area about 150 ft. across around the barrow, together with sherds of Windmill Hill potter, all types of Peterborough ware, and Grooved ware.

The sites at Easton Down are the most extensive known in the region and consist of complexes of various pits, hearths and post holes. Their proximity to the well known flint mines is an added feature of interest, and it is most probable that they were occupied by people connected in some way with the flint mine working. However, the features of the site or sites in general, although more comprehensive than usual in variety, are in no way different from those on domestic sites elsewhere.

In an area of over 34 acres at least four concentrations of surface finds suggesting domestic occupation were noted, and two of these were extensively investigated by Stone in the 1930's. Both produced European/All Over Corded Bell Beaker and Long Necked Beaker pottery, as well as some possible Wessex/Middle Rhine sherds, though usually each type came from separate pits or floors. But European/All Over Corded Beaker sherds predominated on one site, and Long Necked Beaker on the other. On both sites the usual kind of occupation material was associated with the same kind of features. These included large shallow pits not unlike those at Edington, except that they were frequently surrounded

by irregular settings of perpendicular stake holes; smaller pits approximately 3ft. in diameter and 2 - 3ft. deep containing burnt material, and several large, well defined deposits of burnt flint about 18in. thick and containing Beaker sherds, found on the Downs nearby. Stones likens the latter specifically to the sites at Buckenham Tofts. (Stone 1933. 231f.). He describes the larger pits as 'pit dwellings', but, despite the stake hole settings which could represent a light, beehive shaped superstructure, the same general objections to the theory apply here as at Edingtonthorpe. The 6 - 9in. thick 'floors' containing refuse in these pits were near the top of the fill, above a much deeper chalky, sterile layer. Whether or not such pits could ever have been used as dwellings, this stratigraphy suggests that the 'floors' relate to a secondary use of the pits.

Beaker domestic material including pottery of the European/All Over Corded group has also been found at several neolithic causewayed camps, including Whitehawk, Windmill Hill and Maiden Castle, on all of which it is stratified well above the material of the primary occupation in the ditches. Such finds are usually associated with small pits and hearths in the interior of the camps. At Whitehawk the finds are few, and come from a single pit and adjacent hearth and from the upper fill of the ditch nearby; at Windmill Hill the circumstances were very similar, except that there were at least four pits which produced Beaker material, and Long Necked beakers outnumber the European/All Over Corded beakers

by an estimated 60 to 14 (Keiller 1965 80); at Maiden Castle, sherds of both groups were scattered plentifully in the uppermost fill of some of the ditches of the neolithic camp and of the neolithic long mound, and again Long Necked Beaker sherds were present in far greater quantity than the other. Sherds of Grooved Ware and possibly Food Vessel were also found on this site, in contexts implying a rough contemporaneity with the Beaker finds. On none of these sites is there any firm evidence that occupation was other than sporadic and on a small scale at this stage.

The European/All Over Corded Beaker sites in North West Lincolnshire have more in common with the sites of Northern Britain than with the southern group, being mostly surface collections from the sandy 'warrens'. Some such as Crosby Warren, produced sherds of this type only, but most and Risby Warren in particular, a mixture of this and Long Necked Beaker pottery.

The East Anglian Beaker culture, as its name implies, seems to have centred on East Anglia, but finds belonging to it are commonly found in South East England. The most notable site, apart from those of the Essex coast already discussed, is one at present being excavated by Mr Richard Bradley at Belle Tout, on the Sussex coast. It is a ditched enclosure which seems to be of purely Beaker date and construction, and consisted originally of two intersecting

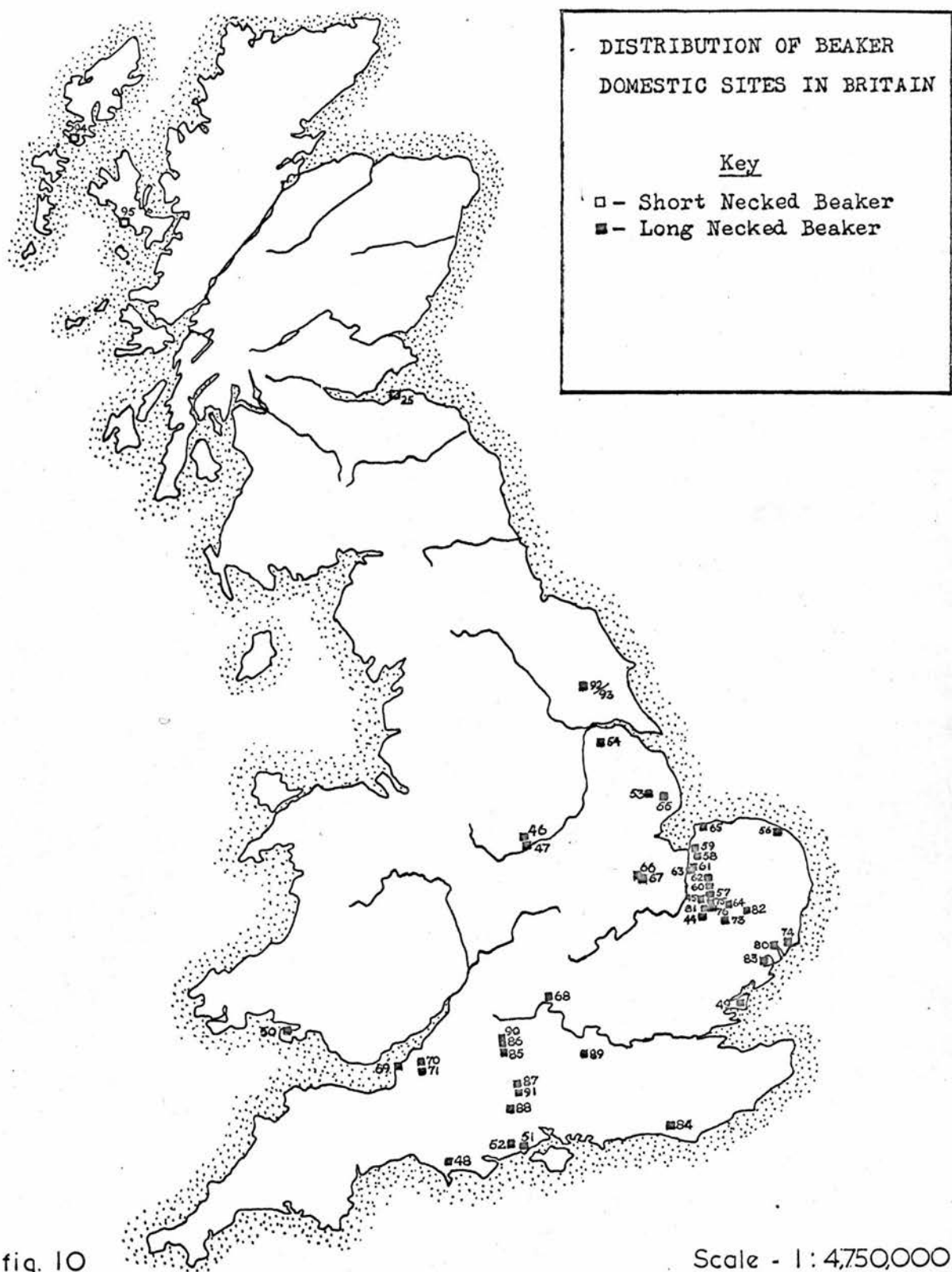
areas surrounded by bank and ditch, the ditch being inside the bank of one and outside it in the other. The total area must have been just over an acre, but over half the site has now gone over the cliff. The site is rather like the enclosures of the Deverel Rimbury culture, except that the finds consist entirely of East Anglian Beaker pottery, over 1000 sherds of it, and flints consistent with such pottery, from ditches, rampart and interior. The ditch of the larger enclosure had been recut several times. Surface erosion has removed several inches of top soil within the remaining enclosure, which may explain why traces of any features associated with occupation inside it are faint. No hearths or specific concentrations of hearth material have been found, but anomalies observed in the natural layer of flint nodules covering the site below the turf may represent the packing of otherwise vanished post holes. Several circular hut sites approximately 10ft. in diameter have been tentatively identified, and the excavator noted that finds were concentrated round but not inside these.

On the Downs of Southern England there is no difference apparent between Long Necked Beaker domestic sites and those producing typologically earlier Beaker material, and often, as has been remarked already, they occupy the same ground. The Easton Down site has been discussed at some length. The typologically later pottery was chiefly of the Developed Southern group, and it seems fairly clear that it belongs to

a separate and presumably later, occupation. Apart from Windmill Hill and Maiden Castle, another causewayed camp, Knap Hill, produced pottery of this type, consisting of sherds of some seven or eight Late or Final Southern Beakers scattered in the upper fill of the ditches and inside the enclosure. At Maiden Castle there is a slight difference in the distribution of the European/All Over Corded Beaker and the Long Necked Beaker pottery, which is of the Developed or Late Southern group. The latter is associated particularly with an area round and in the ditch near the eastern causeway, and with a small pit in that area, and looks consistent with a single period occupation.

Various isolated pits which produced small quantities of Beaker domestic finds have been recorded, as for instance, the one at Bulford Down. Another was found at Itford Hill, cut by the later levelling of the ground during the construction of an enclosure in the later Deverel Rimbury settlement. The Pottery from it appears to be of Long Necked Beaker, and the fill also contained some quern fragments which are of interest. Querns are not usually found in direct association with Beaker Domestic sites.

On another Deverel Rimbury site at Martin Down, Long Necked Beaker pottery and flints scattered below the rampart and at all levels in the ditch fill and inside the enclosure. Finds of later pottery were scanty by comparison, but the only feature which was almost certainly of Beaker date was a large pit measuring 12ft. long and nearly five foot deep.



Text fig. 10

Scale - 1 : 4,750,000

In the south west, Gorsey Bigbury is the largest and most productive site. It cannot strictly be termed domestic, but the finds are domestic in type. The deposits in the ditches are reminiscent of earlier neolithic ones in the lower levels of the ditches of the causewayed camps: there is the same non-stratified mixing of material at all levels, and the same hearth-like layers which could be material dumped there rather than primary deposits. The implications of this will be discussed later. The pottery from the site matches that from a series of finds in caves in nearby Mendip region, the chief of these being Bos Swallet and Rowberrow cavern, near Burrington. Both the latter deposits were found, unfortunately, to have been completely disturbed, but the material with the sherds suggests that they came from domestic hearths or 'floors'. At least 20 pots are thought to be represented in the find from Bos Swallet, and the blackened material associated with them in the miners spoil in which they were found formed a layer about 6in. thick. The pottery is of Developed/Late Southern type and is consistent with a single period occupation. Beaker finds in cave sites are known in Derbyshire, also, as at High Wheeldon, Earl Sterndale, but these are very scanty traces, and do not suggest, as do the Mendip finds, that the caves were habitually or for any length of time used as shelters.

In Eastern England the distribution of Beaker domestic sites continues along the line of maximum concentration of all Beaker finds from the south western edge of the Fens, opposite the eastern Fen edge group, to the Yorkshire Wolds. The well

known site at Fengate, near Peterborough, is on a gravel promontary surrounded by fen, and was estimated to be several acres in extent. The Beaker pottery from it was chiefly of the Developed/Late Southern group. The features of the late neolithic and Beaker occupation as a whole consist of large and small pits of the types by now familiar. Two kinds of small pit were noted, the first being deep and conical, and the second flat bottomed and shallow, but both contained a similar fill of burnt material, flints and bone. The large pits, and particularly Pit I (Wyman Abbott 1910 334), contained sherds and domestic material also, and no post or stake holes are recorded as being associated with them. One find of particular interest was the large rusticated beaker of Wessex/Middle Rhine type which was discovered apparently in its original position, upright and intact in a bowl shaped pit 5ft. across and 4ft. deep (Leeds 1922 26 Fig. 5).

Further north there are traces of domestic occupation on the Lincolnshire Wolds, at Stainsby, Ashby Puerorum, where there is another very productive site consisting of a group of pits, and at Giants Hills Long Barrow, Skendleby, where no more than a scatter of Long Necked Beaker sherds and traces of hearths were found in the fill of the barrow ditch, perhaps the remains of a temporary camp or camps in the ditch. Further north still the 'Warren' sites in the Scunthorpe area have already been mentioned. The most intensively studied of these is at Risby Warren, where a large collection of finds were associated with various hearths, small pits and occupation

'floors' of the usual pattern within an area about 150yd. across, the hearths and pits being clustered respectively in separate groups. This area was closely examined and partly excavated, having been exposed originally by wind action, but a less concentrated scatter of Beaker sherds was found on the surface over a much wider area. Among the hearths there was a small mound, particularly rich in finds, which may have been a midden. The hearths, as usual, consisted of patches of burnt material only, and the pits contained refuse and sand discoloured with humic material rather than ashes or any sign of burning. An irregularly oval 'floor' of blackened sand with a roughly central hearth was associated with a cluster of 15 pits and with a scatter of burnt daub.

The remainder of Long Necked Beaker domestic sites are those preserved under barrows in Yorkshire, Derbyshire and Staffordshire. Often the only record of these is the bare mention by Mortimer of Bateman, of sherds, some of which are certainly Long Necked Beaker, judging by the descriptions given, flints, and sometimes animal bone found in or sealed below the barrow mound, but such finds seem to have been very common (Bateman 1861. 192). Of all these the best recorded and most informative is that at Swarkeston, Derbyshire. Here there was a complex consisting of a scooped out hearth pit, a burnt patch, several small pits and a complex of 262 stake and post holes forming two recognizeable structures, and probably representing at least two phases of construction. One of the structures consisted of two parallel rows of stakes, about

6ft. apart, and at least 40ft. long, and may have had something to do with an animal pen, as the excavator suggests (Greenfield 1960 17). The other consisted of two rectangular post settings, 12ft. square and 10ft. x 4ft. respectively, each with an entrance. The larger had a central post, and though they were not aligned in the same way, both seem to have been connected to each other and to a further complex of post holes which was not excavated. The interior of these was free of finds, and they constitute some of the most convincing evidence for a roofed structure on any Beaker domestic site in Britain. As so often, sherds of 'western' neolithic potter were scattered over part of the site, but the structures do seem to be connected with the Developed Southern material.

Northern Britain

The character of known occupation sites of the European/All Over Corded Beaker culture in Northern Britain is particularly uniform, and therefore requires less discussion in detail. The majority are among sandhills on or near the coasts of North East England and Eastern and South West Scotland, and most of these are known chiefly through surface finds, as the shifting, windblown sands expose buried land surfaces and shell middens, or rabbits bring the evidence to the surface. As a rule, little information is recovered with the finds. Features other than the deposits or 'floors' of occupation material and

the occasional hearth are rarely found, and the exact extent of the deposits is not often recorded. Stratigraphy, too, is often unreliable, owing to the instability of the sands in which the deposits are. Individual sites seem, on the whole, to be smaller and less productive than, say, the Fen edge sites to the south, but some areas prolific in finds, such as Tentsmuir, or Luce Sands, seem to have supported widely scattered sites of many different phases, even within the Beaker cultures. The types of pottery and flint recovered from these northern sites vary very little, but then the range of types within the European/All Over Corded Beaker group is very limited.

The most southerly of these sites, and one unusual in the detail with which it was recorded, is a small one at Beakon Hill, Flamborough Head in Yorkshire. Here, in a natural hollow in a hill of sand and gravel, beaker sherds and flints were associated with a hearth or area of burnt soil, and post holes forming a small, roughly oval setting. This occupation was clearly stratified above another, similar one, identified by finds of Heslerton and Ebbsfleet pottery. Most of the sites to the north, at Ross Links, Northumberland, in the group around Dunbar and Gullane in East Lothian, and on Tentsmuir sands, in Fife, and to the north west at Shewalton and Luce Sands, around the coast of South West Scotland, are all very much of a type, as described above. On the Archerfield Estate, Gullane, three separate, small Beaker occupation 'floors', two of which were associated with European/All Over

Corded Beaker pottery, and one with Short Necked Beaker, were found on a shell mound. These 'floors' were each about 100 sq. ft. in area and a few inches deep, and they consisted of compact concentrations of food refuse, chiefly shells, in discoloured sand, containing pottery, bone implements, flints and animal bone. Although they were fairly close to one another, the pottery from each differs, and there is no reason to suppose that they were contemporary. Nor do they seem to represent an occupation or occupations of long duration, since the quantity of artefacts is not great, and shell mounds build up quickly.

At Tusculum, North Berwick, the evidence suggests a rather more prolonged occupation. The site as excavated consisted of two large 'middens' or occupation deposits, each over 50ft. across and about a foot thick, which produced pottery, flints and animal bone in quantities to rival some of the sites in East Anglia. On the first of these middens was a well defined hearth, high in the deposit. The midden itself consisted largely of shells, but included bones of domestic and wild animals.

A similar but outlying site of some interest is one at Newborough Warren, Anglesey. This does not seem to have been particularly extensive, and is presumably to be linked with the Beaker settlement of Scotland, rather than that to the south or east.

The contrast between this pattern of coastal sand dune sites

of the European/All Over Corded Beaker culture in the north, and of inland sites in Southern Britain must be misleading to some extent. The distribution of Beaker finds in general in Scotland and Northern England tends to follow the lowlands near the coast, but is by no means confined to the coast itself. Finds of flint implements, including barbed and tanged arrowheads scattered in the Tweed valley and in the light soils of North East Scotland attest domestic occupation of those areas, whether or not specifically domestic sites are found to demonstrate the point. In the south west there is one inland site published, at Kirkburn, Lockerbie. Here, on the site of a later, early Bronze Age flat cemetery, All Over Corded Beaker sherds and flints were found in association with a group of small pits, over an area of about 530 sq. yds., as well as earlier neolithic and a few Grooved Ware sherds, associated with separate, but similar pits and two slots containing stake holes. At Old Yeavering, in Northumberland, a few sherds suggest another inland domestic site, though there were no associated features apparent; and in Yorkshire the remnants of at least two sites of the period were sealed under barrows at Barnby Howe II and at Garton Slack.

The Windypits sites, near Helmsley, are usually mentioned as if they were domestic sites but are, in fact, difficult to interpret. They consist of small hearths, often associated with a few sherds, and big deposits of animal bone, sometimes mixed with human bone and also containing a very small quantity

of European/All Over Corded Beaker sherds. These are all in fissure caves which are difficult or awkward of access, and for this reason alone it is difficult to accept that these were domestic sites in any ordinary sense, even if the finds were of the kind and proportions usual on Beaker domestic sites: they are not at all like the cave sites of the Mendips. It is easier to think that they had a more esoteric function, perhaps in connection with funerary rites allied to those of the Chambered Tombs, which were often used by people of the Beaker cultures and which sometimes contain hearths, or that they were used as places of refuge.

Domestic sites of the Short Necked Beaker culture are almost unknown, although sherds of beakers of this type are occasionally found on Long Necked Beaker sites in Southern Britain. This phenomenon is difficult to explain, but is presumably the result of whatever circumstance is also responsible for the scarcity of known European/All Over Corded Beaker sites inland. Apart from the small 'floor' at Archerfield and a few sherds and flints found scattered in Rudh 'an Dunain Cave, on Skye, there is only the site among the coastal dunes at Northton, on South Harris. This last, however, yielded evidence of quite extensive occupation, associated with a stone built, oval enclosure, about 20ft x 14ft. within which was a widely spaced setting of stake holes, a hearth, and a small pit by the hearth. Although the construction of the wall is flimsy this could well represent a roofed hut. There were two distinct occupation 'floors' within this enclosure, and the

structure was itself associated with the earlier of two shell middens, both of beaker date.

Ireland

There are several large and extensively recorded Beaker domestic sites in Ireland, although the sum of knowledge obtained from them does little more than confirm observations made elsewhere.

The well known multi-phase settlement on Sites C and D at Lough Gur, Co. Limerick, included a good deal of Beaker pottery, chiefly of the European/All Over Corded type, but including some with possible Wessex/Middle Rhine affinities. None of this is associated for certain with any of the structures recorded on the site, although its stratigraphical position in relation to earlier neolithic and later bronze age occupation is fairly clear. In Rockbarton Bog, nearby, similar pottery was recorded from hearths in the peat itself. These were built on stones to prevent sinking, and sherds of several pots were found with each, but, because of their situation, they can hardly represent anything but very temporary camps.

At another site, on Dalkey Island, Co. Dublin, both European/All Over Corded Beaker and Long Necked Beaker pottery were found in quantity on the same site, and each appears to form a typologically homogeneous group. This pottery, together with animal bone, flints, burnt stone and charcoal, was found

alongside evidence of occupation by other neolithic cultures in a black occupation layer which appears to cover most of the island. Although several pits and hearths were found, these belonged to the pre-Beaker occupation. The one feature which seemed specifically linked to the Beaker occupation was a shell midden which contained several areas of burning and what looked to be a hearth built of flat stones. Within this midden sherds of Long Necked Beaker seemed to be stratified consistently higher than European/All Over Corded Beaker sherds, while below it were sealed the traces of the earlier neolithic culture. The Long Necked Beaker pottery corresponds roughly to the Developed, Late and Final Southern types, but is distinctive in appearance. The near absence of rusticated vessels amongst it is particularly noteworthy. Sherds identified as Food Vessel were also found, and vessels which seem typologically half way between these and the Long Necked Beakers on the site. There must, therefore, have been at least three, if not four phases of occupation, of which at two were by different Beaker cultures.

The Relationship between Beaker and Other Neolithic and Early
Bronze Age Sites

As we have seen, very many of the Beaker domestic sites were also occupied at some time by one or more other neolithic and early bronze age cultures. Some, such as the causewayed camps, were primarily and largely of an earlier neolithic culture, and the Beaker occupation is of apparently incidental significance. On many more, however, the non-Beaker cultural material is associated with exactly the same sort of features and traces as are the Beaker finds. The later phases of the Windmill Hill neolithic culture must overlap chronologically with the earliest Bell Beakers in Britain (Piggott s. 1962 77), but where they and Beaker material occur together on domestic sites it can usually be demonstrated that they belong to two different phases of occupation, and often that the Windmill Hill finds are the earlier. Where it is Mortlake, Fengate, or Grooved ware which is found thus in association, or Food Vessel, it is fairly safe to assume that, again, they belong to distinct phases of occupation, though this is not usually so clearly to be seen, and the chronological relationship with the Beaker material is usually in doubt. These and the Beaker cultures are at least partly contemporary, and at the causewayed camp sites sherds of all these various pottery types have been found in the upper levels of the ditch fills. Simultaneous occupation of a site by people of more than one culture is a possibility which cannot be proved or disproved on the evidence available.

The majority of the known domestic sites of all British neolithic cultures, including the Windmill Hill, Peterborough and Grooved Ware cultures, exhibit very much the same characteristics as Beaker domestic sites, whether or not they coincide, and occupy very much the same sort of land. Pits of varying size are the most common feature, particularly small pits, and there are hearths and discoloured 'floors', just as on many Beaker sites. A fairly typical example is the site at Hurst Fen, Mildenhall, Suffolk, which consists of a complex of pits containing blackened sand and refuse, and which is on a sand hill in the peat of the Fen edge region.

There is, it is true, rather more evidence for the building of fairly substantial house structures on early and middle neolithic sites than there is on Beaker sites, though this still amounts to little. Such structures may be rectangular, as at Mount Pleasant Farm, Nottage, Glamorganshire, (Savory 1952), or circular, as at Lough Gur, and seem to have been built of timber or stone and timber.

The economy of the Beaker culture in Britain differs from that of the neolithic cultures previously established here, (Jessen & Helbaek 1944, 62-65; Helbaek 1952 196-207) but this difference was evidently not sufficiently great to be reflected in general settlement habits, and grew less in time.

Reasons for the reoccupation of a single site by different cultures are not hard to discover. The various cultural groups inhabiting Britain between the fourth and second millennia B.C. may not have amounted to a very large population

at any one time, but the area of land required under an inefficient farming and hunting economy to support a single individual was relatively large, and the type of land suited to that economy limited. Whatever the differences between the cultures, their requirements in this respect were the same. It is likely, furthermore, that land which had previously been cleared and under cultivation would attract subsequent settlers in preference to virgin land on which the work of clearing and preparation for agriculture was all to do and heavier, and this might explain the near exact coincidence of so many sites.

Unfortunately, comparison of the development of the pottery styles in the different late neolithic and early bronze age cultures is the best means we have of assessing the degree of direct contact between the said cultures, and the nature of this contact is almost entirely a matter of conjecture.

Conclusions

The nature and function of one specific site, at Hockwold, has been discussed at some length. It is now necessary to re-examine and expand the conclusions reached in the light of any further information yielded in the survey of other sites.

So far the similarities between nearly all the known Beaker domestic sites have been more apparent than the differences, and, in view of the simplicity of these sites, this is hardly surprising. Most of the obvious differences between sites seem to have to do with secondary factors, and not with the nature of the occupation site itself, and these will be dealt with first.

Quite a large number are sealed below barrows, and the excavators of these have sometimes assumed in the past that there was a simple and direct connection between the remains on the surface below the barrow or in the barrow mound, and the barrow itself, and that the former was evidence of some ritual prior to the building of the barrow (e.g. Leaf 1940 49). There seems no reason to uphold this view. The primary burials in these barrows are sometimes not of the Beaker culture, but of cultures generally considered to be later, and, at Swarkeston at least, there was a sterile layer between the occupation layers and the material of the mound, suggesting the passage of some time. At Arreton Down the weathered condition of the sherds on the old surface implied that the site may have been abandoned for some time before the barrow was built; at Chippenham V the original

ditch of the barrow cut across features of the site underneath; and at other sites there is firm evidence that occupation extended well beyond the limits of the barrow. If the evidence of occupation is often confined to an area below the barrow mound, this seems to be because the old surface has been eroded away or ploughed out except where protected by the barrow. In every respect, other than the presence of the barrow, the features of the sites in question resemble those of other domestic sites, and it seems far more likely, as Clarke has suggested (Clarke D.L. 1964 557) that the construction of barrows on previously cleared sites reduced the amount of preparation necessary, and therefore had a purely practical purpose. Some large collections of Beaker pottery were associated with funerary sites, notably Chambered Tombs such as West Kennet Long Barrow, but such finds are different in character.

Beaker domestic hearths, or what seem to be domestic hearths are sometimes found on or near the non-domestic henge monuments, as at Durrington Walls (Wainwright 1967) or West Kennet Avenue, Avebury (Keiller 1965 210ff.) but these do not, in any case, represent a prolonged or intensive occupation. The distinctive nature of the site at Gorsey Bigbury has already been mentioned, for the site has some of the characteristics of a small 'henge' and some of the characteristics of a causewayed camp, and it produced much material of a domestic type. In neither event could the site itself be

described as domestic, however. Causewayed camps are now thought to have had a ritual or semi-ritual function which evidently involved their temporary occupation at certain times. Whether or not there is any direct link between the tradition of the causewayed camps and that of the 'henges' is uncertain.

Beaker occupation of the causewayed camps of the Windmill Hill and related cultures is possibly a pure coincidence. It certainly took place long after the builders of the camps has abandoned them, and when the ditches had silted up almost completely, and it does not look to have been of quite the same character as the original occupation.

The features which recur on domestic sites of the neolithic and Beaker cultures are constant. Pits of different size, shape and contents are common and, as the most usual feature remaining of neolithic settlements in general, have been discussed at some length by Isobel Smith (in Field et al. 1964). She concluded that they were usually storage pits, and that after their usefulness as such was over they were filled with refuse. It seems less likely that pits were normally dug for the primary purpose of burying refuse. Houlder (Houlder 1163 14-16) described pits which occurred on a single neolithic site at Hazard Hill, Totnes, and classified them according to size, shape and content as quarry pits, food storage pits, water storage pits and pot stands, and these suggestions, although without much to confirm them, are reasonable and could be held to apply to most other sites. The first kind, identified as large, steep sided pits

containing few or no finds, do not seem to be found on Beaker sites, though some of the larger pits at Edington, for instance, conform to the description to some extent. On most Beaker sites it is difficult to see what earth would have been quarried for, since there are no earthworks, and the soil thus obtained would generally have been unsuited for making mud daub or plaster. Storage pits, according to Houlder, are also large, but contain a secondary fill of refuse, and this seems the most likely use of most of the large pits on Beaker sites, including many that have been called 'pit dwellings'. Settings of stake holes round such pits, as at Easton Down, could represent covers or fences to protect the contents. Many of the deeper small pits, 1-2ft. in diameter, could well have been made to hold skin or pottery containers for water and other substances, and the find of a large Beaker vessel upright in a pit at Fengate supports the idea, though in this instance the pit is much larger and deeper than the pot itself. Others of similar size but filled with ash seem to have been some kind of earth oven and are, in fact, often referred to as 'cooking holes'.

Apart from the cooking holes, hearths on Beaker sites are usually fairly small, and consist of shallow scoops in the ground, or of burnt patches where fires were evidently kindled on the surface without further preparation.

The possible nature of the occupation 'floors' has already been discussed at some length in connection with the Hockwold

sites, and it is unnecessary to add anything further here, except to repeat that they are merely deposits several inches thick, sometimes to be described as 'middens' and that no trace of any substantial structure has been observed in, near or around them, unless one regards the daub scattered around the 'floor' at Risby Warren as such. The 'pot boiler' deposits discussed in connection with the sites at Hoe and Eccles, in Norfolk, and found on a few large sites further the idea of outdoor communal activity as the norm, in this case cooking or washing or some activity requiring the heating of water on a large scale.

If we return to the discussion of the evidence for huts or other structures on Beaker sites there is a little more to add. Clarke's claim that Beaker settlements regularly consisted of wattle and daub huts (Clarke, D.L. 1964 552) seems overstated at the least. Traces of these are rare, and we must rather conclude with Smith that, in Lowland Britain at least, although the absence of such traces can only be taken absolutely for granted in ideal conditions where the old ground surface is well preserved and recording of the site has been meticulous, a state of affairs which is not common. Light wattle or timber fences and windbreaks were certainly constructed on some sites, and it is probable that pens were built for the animals, though these may have been of brushwood only, and have left no trace. At Swarkeston there were the remains of substantial-looking rectangular enclosures which could have been huts; at Belle Tout there were faint traces of

circular structures, also of timber and also possibly huts; at Northton there was an oval, dry stone walled structure probably a hut; and at Gwithian, Cornwall, a larger, circular timber structure with a central post, which seems to have been reconstructed at least once, may have been associated with slight traces of European/All Over Corded Bell Beaker occupation of the site, though the apparent scarcity of this Beaker material seems a suspicious circumstance, and the hut itself is of a type characteristic of middle bronze age cultures.

Sites on the Continent which afford a comparison are rare. Childe, discussing late neolithic house types in general in Europe, describes the small, square, unicellular houses of flimsy construction on such sites as the Goldberg, and hints that the type may have been in use within the Beaker culture (Childe 1952 82). The huts in question are about 4m. x 4m. in area and sunken about 20cm. into the ground, often with a central pit and hearth, and the walls and roof seem to have been supported by flimsy saplings only. But the resemblance between these and the 'pit dwellings' of Easton Down or Edington is superficial. At Vlaardingen, in the Netherlands, at least one rectangular timber structure was associated with an early European Bell Beaker site (Van Regteren Altena et al. 1962 234), and at Arnhem rectangular timber huts were also recorded on an unpublished Beaker site (Van Givven 1958 39). At a domestic site at Schipborg, near Anlo, a series of rectangular and circular post holes in

roughly rectilinear setting were associated with Barbed Wire Beaker sherds, but this does not seem to have been a roofed structure (Van der Waals 1962). None of these structures seem to have been particularly solid. The one at Vlaardingen had a central row of posts, presumably to support the roof ridge, but the whole seems to have been a flimsy, hasty construction, with thin, un-dressed wall posts. The majority of Beaker domestic sites known in Western Europe, and there are not very many, seem to be like the majority of those in Britain.

It would appear that rectangular and circular enclosures which look as if they were huts were built at least occasionally, and that the variation in plan does not necessarily have a cultural or chronological significance. Rectangular constructions are found on early European Bell Beaker and on Long Necked Beaker sites, circular ones on European Bell Beaker (?) East Anglian Beaker, and Short Necked Beaker sites. None of these is in any sense a 'pit dwelling', and the various arguments against the general use of pit dwellings need not be repeated here.

Not much can be said concerning ditched and banked enclosures in connection with Beaker domestic sites, although this is a topic which has a strong bearing on the question of the nature of Beaker settlements, and further work on Belle Tout may be awaited with interest. Since Beaker domestic sites are so often closely similar to the domestic sites of other contemporary and earlier neolithic cultures in Southern

Britain, it may be useful to draw attention to the site at Hazard Hill already mentioned. This consists of a cluster of the usual pits and hearths in a corner of a rectangular ditched enclosure, measuring 65ft. x 35ft. There are a few enclosures of uncertain but probably late neolithic or early bronze age affinities, but whether or not they are domestic or have any connection with the Beaker culture is impossible to say at present. At Playden, near Rye, there is a circular ditched enclosure about 65ft. in diameter, surrounding what looks very much like a circular hut of timber, with a stone footing on one side, and associated with sherds which have both 'western' neolithic and sub-Beaker characteristics. This looks very much like some kind of ritual, possibly funerary, monument, however. (Cheyney 1935).

Variations in function among the different sites are difficult to discern. A few, such as the hearths in Rockbarton Bog, or some of the shore sites, evidently are the remains of no more than camps of short duration; but the size of a site as excavated is not always a reliable guide, and many seemingly small sites may be a part of something larger. Caves and natural shelters were evidently occasionally occupied on a fairly small scale, but the characteristic Beaker domestic sites consist of a combination of some or all of the features discussed above, and there is some reason to think that these features were grouped on the site according to their specialised function and to the extended family or whatever social unit used them. Thus small and large pits and hearths occur in

clusters and may be grouped separately, as apparently at Risby Warren. Occupation 'floors' are less common and seem sometimes to be apart from and sometimes within or near the clusters of pits. 'Pot boiler' sites seem often to be set slightly apart from the main concentration of features. All this tends to confirm the impression received at the Hockwold site, that these were somewhat diffuse settlements of a small group, or several small groups of people, most of whose domestic activities were conducted in the open air and on some sort of communal basis involving more than the single family unit, and this on by no means as organised or as permanent a basis as the 'homesteads' which developed among the later Bronze Age cultures.

It is not at all certain, though on some sites it seems probable, that such settlements were occupied seasonally, or in any other way intermittently by the same group of people. The evidence of the Northton site might suggest this. It is clear, however, that they were often occupied at different times by quite different groups within the Beaker culture, usually the European/All Over Corded Beaker, East Anglian Beaker, and Long Necked Beaker groups. The degree of relationship between such separate occupations is probably the same as that between any of the Beaker groups and the neolithic occupations which also commonly occur on the same sites.

The duration of any single occupation must usually have lasted several months at least, since on most of the major sites, as at Hockwold, the local deposits of occupation material

are several inches thick. On the other hand, even if we assume the groups of people to be very small, and this is largely a matter of guesswork at the moment, such sites cannot represent continuous occupation of more than a year or two at a time. Whatever the exact duration of occupation, frequent moves were probably necessitated by exhaustion of the arable and grazing land in the immediate area, and no doubt by other factors as well. Since many sites are often found within a few miles of one another, such movement may have been within a restricted area, but it must be stressed again that no close resemblance in detail is usually discernible between pottery assemblages from any two sites, even within the same locality.

A very few settlements, such as that near the flint mines at Easton Down, no doubt grew up in connection with a specialised industry, although the only distinction between the site named and any other large settlement is its proximity to the flint mines and working floors. Similar evidence of occupation, though on a smaller scale, has been noted at Church Hill and Black Patch flint mines, in Sussex, and on a very small scale at Grimes Graves, Norfolk, though larger settlements may have existed than are recorded at any of these sites.

There remains a great deal of work to be done on the ecology of Beaker domestic settlements. The economic foundation of the known sites probably varied a little in emphasis, especially in geographically different areas of the British Isles, but such variations are scarcely apparent in the

information obtained from the sites themselves. The coastal sites obviously reflect a dependence to some extent on sea food, particularly such as could be collected on the shore itself; but the middens at Tusculum and Archerfield contained the bones of domestic and wild animals also, as well as evidence, in the form of grain impressions in the pottery, for the cultivation of barley. Whether the latter was cultivated near the actual sites is, of course, not known. In both Northern and Southern Britain, animal husbandry seems to have been of more importance in the economy than agriculture, though to what degree is still a matter of conjecture. Ox, sheep and goat are the most commonly represented species, and of these, ox is the most common of all. Barley was the chief crop cultivated (Helbaek 1952 205; Jessen & Helbaek 1944) and farming was supplemented by hunting, particularly of red and roe deer.

The growing of crops usually requires that the growers remain settled for several months of the year, and on this score a small Wessex/Middle Rhine beaker from Handley Down is of particular interest. It bears the impressions of 15 flax seeds, and Helbaek points out that such an accident implies that flax was grown in quantity and presumably, therefore, deliberately. If this was for fibre, though the point is not at all certain, the technical processing, spinning and weaving, would require an even more settled mode of existence than the growing of grain for food (Helbaek 1952 207).

The composite picture of the way of life of the Beaker people, as gained from the study of the known domestic sites of the time, is of small groups shifting about, possibly within a small area, possibly seasonally, or possibly from year to year or at slightly longer intervals, growing crops, but never achieving any real degree of permanence, and building grave mounds and religious monuments as almost their only lasting structures. This is not the orderly cycle of shifting agriculture practised by early neolithic cultures on the rich loess soils of the Danube region, nor yet in any sense nomadism, but something in between. It seems to be a way of life characteristic of all Beaker cultures in Western Europe, and of most other neolithic cultures contemporary with or immediately preceding them in the same region, and certainly of those in Britain.

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PART IV

RUSTICATED BEAKERS

Introduction

The study of pottery from Beaker domestic sites in Britain shows how significant a proportion of this is 'rusticated'. The techniques of rustication are found only rarely on the pots from funerary, or probably funerary contexts, on which studies of the Beaker cultures have had chiefly to be based, and have consequently been treated in somewhat summary fashion in such studies.

The amount of material known is still comparatively small. Domestic assemblages provide most of the firm information on rusticated ware within the context of the Beaker cultures, but because the known sites are so few in number, so obviously biased in both geographical and chronological distribution, and so often inadequately recorded, the study of such rusticated ware must remain, at present, full of uncertainties and queries. A number of isolated finds of complete, or nearly complete vessels help to give a clearer idea of the range of forms and decoration to be found, and it is evident from these examples, and from the domestic material, that it would be unsafe to place too much emphasis on typological comparisons between vessels of this type and those of the better known and better represented 'fine' ware groups. The decoration may differ in the way it is disposed on the pot,

as well as in technique, and the forms show differences which must often be functional in origin. A self standing typology for the group, arrived at in the light of demonstrable, direct associations with fine ware types, is a sounder basis for study.

Since this rusticated ware seems, even on such evidence, to form an important element in the Beaker cultures in Britain, it is obviously desirable that its origins, affinities and development here should be investigated as fully as possible, both within the framework of the Beaker cultures and outside it, since similar techniques of decoration occur on the pottery of many late neolithic cultures of comparable date in the British Isles.

Furthermore, since Beaker cultures are a European phenomenon a tenuous, not always clearly defined network of cultural links, extending from Central Europe to Ireland, and from North Germany to the Mediterranean, rusticated beakers, as every other aspect of the Beaker cultures of Britain, have to be seen ultimately in this wider context.

RUSTICATED BEAKERS IN BRITAIN

Presumably because of the paucity of known or published material, there have been few attempts at a classification of British rusticated beakers. Clark (Clark J.G.D. 1936 19-23) defined three types on the basis of the decoration alone, and established, loosely, their Beaker context. He limited the term 'rustication' to plastic treatment of the surface, and his Arminghall (random jabbing and pinching), Holdenhurst

(ordered arrangement of jabs and pinches), and Somersham (ribbed) styles are not adequate to cover the wide range of pottery types now known: moreover, they have no reference to their various contexts.

Robertson Mackay (Robertson Mackay 1961¹ 103) criticised Clark's narrow definition, and outlined a survey of methods of rustication. His study was based on material from domestic sites of the Long Necked and East Anglian Beaker cultures.

ApSimon (ApSimon 1961. 109,112) made a fundamentally useful distinction between a Bell Beaker group, in which only the simpler forms of rustication occur, and the more complex, plastic rustication on vessels which seem to be found in association with Long Necked beakers only, but David Clarke (Clarke D.L. 1964; 1967) is the first to consider systematically the purely domestic pottery types proper to each of the main Beaker cultural groups as redefined by himself. His survey is comprehensive, but brief and generalised. Discussing rusticated ware, he divides it into non-plastic, plastic (non-zoned) and plastic zoned, and he touches also on the subject of the origins and development of the British material.

His conclusions often appear rather sweeping, and he depends heavily on what is little more than conjecture to fill

1. Summary of a paper prepared for the British Association, Section H. Norwich, 1961.

in gaps, but an overall picture emerges for the whole span of Beaker cultures in Britain, of a developmental series in which the proportion of rusticated ware to non-rusticated gradually increases, and the techniques and styles of rustication become increasingly elaborate. Within the framework he has outlined, there is room for further examination of the evidence, and for discussion of his conclusions, as well as for refinement in detail.

European and AOC Beaker

There are enough good associations, both domestic and otherwise, to establish that vessels with non plastic rustication formed an integral part of the pottery normal to the European and All Over Corded Bell Beaker cultures in Britain. This rustication consisted most usually of finger nail impressions, either singly or paired in a 'crow's foot' pattern, and arranged randomly or in vertical rows over the whole surface of the pot. There seems little point at present in dealing with the European group separately from the All Over Corded Beaker ware. For the latter, evidence is much more abundant, mainly because of the domestic assemblages from the coastal sites of north east England and of Scotland, and European Beaker sherds occur in many of these.

The best association between European and rusticated beakers is that at Brean Down, Somerset, a closed find of an unmistakable European Bell beaker of typologically early appearance with part of a large beaker of similar profile,

decorated with non-plastic, 'crow's foot' rustication. Judging by the finds from the Easton Down sites, the domestic pottery of this group was more usually completely undecorated (Stone 1931. 369; 1933 233; 1934), Though here the sites are of mixed date, and the pottery associations often unclear. On excavated sites producing All Over Corded and European Bell Beaker pottery, such as Kirkburn, Lockerbie (Cormack 1963 Figs. 6,7), Tusculum, North Berwick (Cree 1908. Figs. 9-12), and Archerfield, Gullane (Curl 1908), a small quantity of finger nail rusticated pottery occurs, although a far larger proportion of coarse wares are undecorated.

Clarke makes no formal distinction between finger nail and jabbed or impressed rustication within his non-plastic group. The latter techniques do occur in the context of the European/All Over Corded Bell Beaker culture, but are less common than the other. The vessels in question are often large and straight sided, or with high shoulders and narrow mouths; the decoration on them consists of impressions or jabs made with the end of a blunt ended stamp, regularly spaced over the surface of the pot. At Kilkey South, Ross, (Henshall 1963 255) the upper part of such a large vessel, decorated with cuneiform jabs, was found in a chambered tomb, together with All Over Corded Beakers. Material from a Chambered tomb cannot be considered a closed find, except in a very broad sense, but in this instance the rusticated vessel resembles the others so closely in form that it is probably safe to consider the association as direct. There are one or

two similar finds in domestic contexts as, for example, at Rockbarton Bog, where sherds of a large, straight sided vessel decorated on the upper part with spaced impressions of a square ended stamp were associated with sherds of European Bell Beaker (Mitchel & O'Riordain 1943 Fig.6). At Edington Site 8, sherds of a beaker of normal, wide mouthed Bell Beaker form and size, with decoration similar to the Rockbarton Bog vessel, were found also in apparent association with European Bell Beaker sherds (Fig. 39: d,e,f).

A small number of complete Bell beakers with 'crow's foot' rustication have been found in graves, or in circumstances which suggest that they were originally placed with bodies of which all trace had disappeared by the time they were found. These often appear to carelessly made or degenerate, but have a recognizable, wide mouthed, European Bell Beaker profile, and are of a size normally found in graves. One such was found in a grave with two other vessels, one a fine European Bell Beaker, and the other of the same type but degenerate appearance, at Brantham Hall, Suffolk (Clark J.G.D. 1931b. 356; P1. XXVIII:3-5) and this particular example has parallels in isolated finds from Sheepwash, Iford, Hampshire (Calkin 1951 P1.1b), and Tottenhill Church, Norfolk (Kendrick & Hawkes 1932 P1.VIII:3). Normally the decoration on these covers the entire surface of the pot, but occasionally zoned decoration seems to be foreshadowed. The beaker from Iford has a break in the decoration at the shoulder, and another of possible European Bell Beaker affinities, found with an inhumation at Thorington

Hall, Whorstead, Suffolk (Clark J.G.D. 1931b. P1.XXVIII:1), has rows of 'crow's foot' decoration arranged in two bands around the neck and belly. The only known example of plastic rustication possibly associated with this group of pottery is a sherd from Barrow 11, Crichel Down, Dorset, which is decorated with flattish, horizontal, pinched ribs, in a manner usually associated with East Anglian Beaker pottery. The sherd is one of a number from the barrow mound and a pit below the barrow, presumably from a domestic site, and all the other sherds are from classic European and All Over Corded beakers, together with one decorated with simple finger nail impressions.

As far as can be seen, the rusticated and coarse vessels of this group are often larger than the fine beakers, but resemble them fairly closely in shape, with wide and narrow mouthed forms, often with a cordon below the rim. Such rim cordons seem particularly common on both rusticated and non-rusticated beakers from domestic sites, and are presumably functional in origin.

Within the group it is almost impossible to isolate the earliest elements which represent groups of immigrants from the continent, and even more so to establish, on internal evidence, whether rusticated pottery formed a part of their culture. This is a question which can better be answered by reference to early, dated finds on the continent. As Clarke indicates, the European and All Over Corded Beaker cultures, although the first to be established in Britain, had a very long life, surviving in some form perhaps as late as c.1670 (Gak 800. Charlton Sandyford, Northumberland)

and there is no reason to suppose that all the major known sites are particularly early. To what extent, if at all, the associated rusticated wares underwent modification during this period, is uncertain, but it does not seem to have been very great. Perhaps the practice of putting rusticated beakers of this type in graves was developed in Britain and is an indication of later date, since it is found rarely, if at all, in the parent cultures of the continent. If so, the only developments noticeable in the examples to hand are a general slackness of profile and the tendency toward zoning which has already been remarked upon.

Wessex/Middle Rhine Beakers

This group corresponds to some extent to Fox's B1 subdivision (Fox 1943), and represents, in Clarke's definition, a second Beaker immigrant group from, as the name indicates, the Middle Rhine area. In it there is very little evidence at all to confirm the presence of rusticated pottery, and in the absence of any certainly identified domestic assemblages it is impossible to get a sound idea of the importance of this element in the culture relative to other pottery types. If the pottery of Lough Gur Site D is of this group, as Clarke suggests it may be, the types and proportions would seem to differ little from those of the preceding groups. Undecorated coarse ware is more common than rusticated ware, and rusticated ware is decorated with simple, non-plastic, finger nail impressions (O'Riordain 1954. Figs. 35-37).

Very largely, the proof rests with a single closed find from Fakenham, Suffolk, possibly, as Clarke suggests, from a grave, though no body was found. The report states that the finds, including the pottery, a fine flint dagger and a bronze ring, were from a pit or sunken floor, and notes in the Ipswich Museum indicate that the artefacts were found in blackened, charcoal flecked sand. (Maynard 1952 11f.) The pottery consists of parts of two good examples of Wessex/Middle Rhine beakers, and two sherds of a large, thick walled vessel, decorated with non-plastic 'crow's foot' impressions, apparently placed horizontally in rows, almost in 'false cord' style (Fig. 41:f,g). There were also several sherds of thick, coarse, undecorated ware.

Clarke mentions a possible association, in a Wessex/Middle Rhine grave group at Summertown, Oxford, of a small beaker decorated with single finger nail impressions and a narrow mouthed Bell beaker decorated all over with horizontal lines. Another rusticated beaker, from a grave at Stanton Harcourt (OXON. 55) although it is without direct association, seems to belong to the same group. It has the elongated, shallow S profile, and slight foot characteristic among Wessex/Middle Rhine beakers and is decorated with horizontal flat ribs, made with paired finger nail impressions in a sort of 'false cord' style (Hamlin & Case 1963. Fig. 8). It comes from a group of graves associated with a ring ditch, one of which produced a Wessex/Middle Rhine beaker (OXON. 54) and

another a cord impressed beaker of tall, narrow S profile and ovoid body (OXON.56) which Case suggests need not be earlier than the others (Hamlin & Case 1963. 33).

There is a large beaker, probably a storage jar, found upright in a pit at Fengate, Peterborough (Leeds 1922. 225 Fig. 5), which resembles the Wessex/Middle Rhine beakers in profile, with a slight rim cordon, narrow base, and the upper $\frac{2}{3}$ of the body decorated with rows of single finger nail impressions. It has a strong likeness to some North German Riesenbecher, though the characteristics mentioned relate equally well to Westdeutschebecher. Unfortunately, there are no directly associated finds, nor, apparently, any other Wessex/Middle Rhine pottery from the site.

In the closely related North British/Middle Rhine group there is no direct evidence for rusticated ware, and for the North British/North Rhine group Clarke mentions only one rusticated beaker, from a grave at Hasting Hill, Offerton, County Durham, attributed on the basis of its form alone. If it is such, it is interesting that the decoration consists of differently shaped cuneiform and oval jabs arranged in zones. The group as a whole, according to Clarke, is contemporary with and shares a similar background on the continent to the Barbed Wire Beaker culture.

Barbed Wire and East Anglian Beakers

Barbed Wire beakers represent a development somewhat out-

side the main stream of Bell Beaker cultures, and on the continent, in North Germany particularly, can be seen to contain a very strong non-Bell Beaker element. In Britain the finds of characteristic pottery, decorated with thread wound stamp impressions, concentrated in the South and South East, represent probably the latest group of Beaker culture immigrants to arrive from the lower Rhine area. Their traces are hard to follow, and their culture seems quickly to have been absorbed as an element in the developing East Anglian Beaker culture which forms one of the terminal avenues of Beaker cultural development in this country (Clarke D.L. 1964; 1967). Isolation of the Barbed Wire Beaker culture and positive identification of finds belonging to it is a difficult matter, since East Anglian Beaker assemblages also contain 'barbed wire' decorated sherds. Both cultures, however, include in their pottery a large proportion of rusticated vessels and see the introduction, or at least, the rise in importance of a new, plastic style of rustication.

The one well published domestic assemblage from Site 114, Lion Point, Clacton (Smith I.F. 1955), has produced most of the good evidence for rusticated ware in the context of the unmixed Barbed Wire Beaker culture. It is a closed find from a 'cooking hole', and there can be little doubt that it is correctly attributed. Its early date is attested by a radiocarbon date of 1800 ± 150 B.C., (BM 172) although this may be regarded as a little too early at present, in view of the strong evidence on the Continent for dating the culture

post c.1700 B.C. Of the eight beakers represented in the find, six are rusticated. The forms of these seem to follow the barrel or shallow S profiled bell shape of the 'barbed wire' decorated beakers; their decoration is mostly non-plastic, consisting of 'crow's foot' impressions, sometimes in vertical rows, finger tip impressions, and continuous horizontal lines formed by horizontal finger nail impressions, but one sherd has horizontal ribs formed by pushing up the clay with the finger tips (Smith I.F. 1955. Fig. 1:6). Non domestic finds such as are ascribed by Clarke to this culture seem to confirm the general use of a non-plastic style of rustication, much the same as that found on European and All Over Corded Bell Beakers, though it is hard to be sure because the quantity of known material is so small. No certain parallels have been found in Britain for the one ribbed sherd.

An all-over decoration of flattish, horizontal pinched ribs certainly does occur quite commonly on pottery of the East Anglian Beaker culture, however. Several fairly large assemblages from domestic sites are known, of which the largest are those from the submerged surface at Lion Point and Dovercourt. These in contrast to the domestic groups of the European and All Over Corded Beaker cultures, consist almost entirely of rusticated sherds.

Most of the pots are decorated in the same manner as those on Site 114, but some have more heavy, plastic pinching of the surface, and there is at least one sherd decorated with alternating rows of horizontal and oblique finger nail impressions,

and another with horizontal pinched ribs. This last may even have been zoned, since there are sherds with random spaced pinches which appear to be from the same vessel. All of them, large and small, tend to be barrel shaped, sometimes with rim cordons.

At Belle Tout, in an East Anglian Beaker assemblage of over 1,000 sherds, at least 80% are rusticated, the majority in 'crow's foot' technique or with single finger nail impressions, but some with flattish, horizontal ribs defined by a 'false cord' technique. From the unpublished site at Great Bealings there are several sherds with such 'false cord' decoration associated with East Anglian Beaker sherds, and from Witton, Norfolk, there is a probably associated find of two such sherds and a part of a very large, high shouldered beaker decorated with spaced, heavily plastic finger pinches. (Fig. 44). The group of East Anglian beakers from Shoebury, Essex, is from a quarry, and the circumstances of the discovery are not recorded; typologically, however, it seems homogeneous. More of the beakers represented here are of fine ware, chiefly decorated with toothed or notched stamps, than are rusticated, and the technique of rustication used is finger tip impression, in one instance closely spaced to push up slight ridges. There are also two large, undecorated beakers with high shoulders and rim cordons but, as a rule, undecorated vessels do not seem to have been in common use within this culture.

In addition to the domestic, or probably domestic groups of sherds there are a considerable number of single finds, most, if not all of them from graves, of rusticated beakers which

appear to be of the same culture. Among these as a group, a rather higher proportion than of the domestic finds are decorated with horizontal ribs, ranging from the non-plastic, defined with the finger nail, as on one from Kingston Buci, Sussex (Musson 1954. 188; Fig.1), to the fully plastic finger pinched, as on those from Dover (Ant. J. XVI 459; P1.LXXXVIII) and Lakenheath, Suffolk (Fox 1923. P1.1;3) Others are decorated all over with rows of finger nail impressions, or jabs or incisions which give the same effect, such as on one from Halstead Essex (Hull 1946. 67; P1.IX:1), or on another from Houghton, Huntingdonshire (Coote 1932. 248; Fig.3).

Judging by all these finds, both domestic and funerary, the usual form of both small and large rusticated beakers in the East Anglian group was the same as that of the fine ware; a barrel shaped or high shouldered, ovoid body, with an outward curving or rolled rim and sometimes a foot. The most common type of rustication was still non-plastic and generally finger nail impressed, but ribbed and plastic decoration appeared and became increasingly common. In either case the decoration seems to have covered the entire body of the beakers without any break or zoning, and the stylistic relationship between the horizontal emphasis of the ribbed decoration and the horizontal linear decoration of the fine ware, whether comb, cord or 'barbed wire' impressed, is obvious.

Southern Beaker

This group has produced the greatest quantity of rusticated pottery of any, and the most widely varied. Most of the key data comes from Long Necked Beaker domestic sites such as Hockwold, and the survey of the Hockwold pottery will have shown how great the variety is. The proportion of rusticated ware on such sites averages about 50%, although it tends to be less in the typologically earlier groups and more in the later ones. Undecorated pottery is hardly known.

It is not often possible to reconstruct profiles with confidence from the sherds remaining, but it seems as if the small rusticated vessels retained the necked beaker form, and are in most respects like the fine ware beakers. The larger vessels also, though no doubt intended for a greater variety of uses, adhere fairly closely to the basic shape. The profile does tend to be slacker, however, and single or double cordons below the rim are particularly common: Often the rim itself is thickened. Straight sided, conical bowl shapes occur sometimes, as possibly, Hockwold (Fig. 9 P93.050) and an isolated find from Moordown, near Bournemouth (Calkin 1951 P1.1:b).

The usual range of types of rustication is represented in the Hockwold finds, although the proportions in which these occur seem to vary from site to site. The simpler types of rustication continue in use and remain the most common.

'Crow's foot' decoration covering the whole pot is a particularly frequent style, although now the technique differs slightly from

the completely non-plastic treatment most usual among the pottery groups discussed above, and the clay tends to have been very slightly pinched up (e.g. Fig.7; 22; 23; 37:b,e). There are also the various forms of jabbed and impressed rustication, of which impression with the end of a small bone and cuneiform jabs seem to be the most common (e.g. Figs.29; 37:a; 41:a; 42:b). On both small and larger pots, but particularly on the large, coarser ones, there is a greater emphasis on the plastic treatment of the surface. Ridges are pushed up with the thumbnail, surfaces are dimpled all over with finger tip impressions, and much use is made of horizontal and vertical pinched ribs. Very rarely, bumps pinched from four sides are found, as at Hockwold, (Fig. 24); Chippenham (Fig. 35:b) or Lakenheath (Fig.37:h).

On the domestic sites anything between an estimated 12% and 35% of all the rusticated pots have the decoration arranged in zones. (The proportions seem to have no significance in relation to any difference in the date of the sites.) For the non-domestic finds of both small and large rusticated beakers the figure is about 50%, the rest being decorated in all-over style. The zoning consists of the arrangement of bands of decoration, combining various techniques of rustication, over the whole surface of the pot. (e.g. Figs. 8; 9; 10; 25; 35; 37:d,h; 38:d; 41:b; 42:a; 43:h,1; 45)

It is used chiefly on pots which have, recognizeably, the necked beaker form, and the disposition of the zones relates to the form of the pot in the same way as does the zoning of the fine

ware beakers. Generally speaking, the division between the neck and body is emphasised by the division of the decoration into separate bands covering those parts. Horizontal ribs from narrow bands at rim and base of neck, sometimes being associated with a raised cordon, particularly on larger vessels, and between them, covering the rest of the neck, is a broad zone having a vertical emphasis, sometimes with vertical ribs, as in the large beakers from Somersham and Great Barton (Fox 1923. 26 Lehmann 1967. 66f: Figs. 1,3) or the smaller beakers from Hockwold Site 93 (Fig.10: P93054), or sometimes with rows of spaced pinches. The body is normally covered by another broad zone of spaced pinches or vertical ribs, sometimes with a narrow zone of horizontal ribs at the base, or horizontal ribs may continue down from the shoulder, as on the Somersham beaker. The smaller beakers tend to conform more strictly to the scheme of a horizontal emphasis at rim and shoulder and a vertical on neck and body. Rarely, ribbed decoration is arranged to form rectangular panels, or even more elaborate designs as on sherds from Hockwold (Fig.11:P93.067; 068) Chippenham V (Fig.35:c) or Reffley Wood (Fig.43:j,k) designs.

On a few beakers, as we have seen, the techniques of rustication and comb impression are used together. Sometimes the two are combined in narrow zones which alternate with undecorated zones over the whole pot, as on beakers found at Chippenham V and at Goodmanham, Yorkshire, both illustrated by Leaf (Leaf 1935. Figs.15,19); more commonly the neck, and

sometimes part of the body, is decorated in normal fashion with comb impressed or incised techniques, and the rest of the body with finger pinches or some other type of rustication. There is a rood, if rather unusual example of the latter kind from Hockwold Site 93 (Fig.5: P93.030), and others from Houghton, Huntingdonshire (Coote 1932. 248, Fig.1) and Ganton, Yorkshire (Greenwell 1977. 162, Fig.101). Sometimes rustication is confined to a single row of finger pinches round the neck or base, as on one beaker from Brantham Hall, Suffolk (Clark 1931b. 360; P1XXX:8).

Most of the Long Necked Beaker domestic sites belong to the middle and late phases of that culture and, as Clarke admits, it is not easy to identify any of his Primary Southern Beaker pottery among the sherd material from them. It is impossible to be sure, therefore, whether the more elaborate types of rusticated ware commonly found on domestic sites were present in the Primary Southern Beaker group, or whether there is any development or change in the types of rusticated pottery in use, to correspond to the development in the pottery types as a whole, though the latter supposition, at least, is likely. Elaborate zoned styles were certainly common in the Developed Southern phase in eastern England, at Chippenham V, for instance, and analysis of the rusticated pottery from all the major sites, though perhaps not a very reliable guide, suggests that in the latest assemblages, as at Cottage Field, there was a reversion to the general use of simpler styles, often non-plastic, even though the proportion of coarse ware to the whole increased.

It may be significant, too, that from Gorsey Bigbury and the cave sites of the Mendips, rusticated pottery forms a much lower proportion of the total assemblage than is usual in Eastern England, and that amongst the Long Necked Beaker pottery from Dalkey Island, Co. Dublin, it is rare, and includes only one possible example of a zoned rusticated beaker (Liversage 1968. P1.VII:P89)

Northern Beaker

As far as can be seen, zoned rustication appears among the Long Necked Beakers already developed in all its complexity. It would be reasonable to expect, as Clarke confidently states, that this mode of decoration was brought over from the continent at an earlier stage of development within the Primary North British/Dutch Beaker culture which forms the starting point of the Short Necked, or Northern series of beakers, and was subsequently transmitted to the Long Necked, or Southern series which developed out of these. Unfortunately, there is virtually nothing concrete to support this hypothesis. The continental material will be considered in detail later, but it should be noted here that, as evidence, it is less conclusive than Clarke would have it. In Britain the almost total absence of Short Necked Beaker domestic sites means that we cannot assume a rounded knowledge of the Short Necked Beaker culture, and there is an equally mystifying shortage of even isolated finds of rusticated beakers attributable to this group. The small

collection of Late Northern sherds from Archerfield, Midden II (Curle 1908) does not include any rusticated ware, and the one 'crow's foot' decorated sherd from Midden III is not definitely associated with Short Necked Beaker material. The pottery from Northton apparently does not include rusticated beakers, either. All we have are a few single beakers which could be classified as Short Necked. One of the beakers from Muirkirk II may be of this type (Fairbairn 1927. 272, Fig.5): the profile is slack, and the decoration includes vertical rows of pinches on the body. The neck appears to have been decorated in comb impressed technique. There is a beaker with random finger nail decoration from Burial 7a in Barrow 4, Painsthorpe Wold, which could be Short Necked, judging by the form (Mortimer 117, Fig. 282), and from Wincanton, Somerset, comes a beaker with a zone of vertical ribs on the neck which Clarke identifies as Developed Northern (B.A.P. 42). This scarcely adds up to a sufficient body of evidence on which to base any firm conclusions, and the question of zoned rustication coming to Britain with the Primary Northern Beaker culture must be left open. There is another beaker cited by Clarke, a large necked vessel with zoned rustication in the National Museum of Archaeology in Edinburgh, whose value as evidence must be discounted entirely. It is from a purchased collection, its provenance is unknown, and on purely typological grounds, it could be a Long Necked Beaker. Height of neck alone is no criterion for the classification of a beaker, as Clarke himself stresses, and some of the pottery from domestic sites

indicates that large beakers with short necks probably existed as functional variants within the Long Necked Beaker culture. An important consideration is that, so far, no scheme of zoning on rusticated beakers is known which can be identified with a prototypical or divergent phase in the development of the known Long Necked beaker types, or specifically, can be seen to relate to Short Necked Beaker zoning as the known, zoned rusticated beakers relate to that of the Long Necked Beakers.

RUSTICATED BEAKERS ON THE CONTINENT

As we have seen, rusticated ware forms an important part of the domestic pottery of several, if not all of the Beaker cultures in Britain. Since these cultures originated with groups of settlers coming from the middle and lower Rhine area, it is desirable that the subject of Beaker domestic pottery in Germany and the Netherlands be examined, if only to obtain a better understanding of the background and possible origins of the technique of rustication in Britain. Such a review may also help to shed a little new light on the wider composition and interrelationships of the Beaker cultures in western Europe.

The term 'Beaker' on the continent covers, in this context, both the Bell Beaker and the Single Grave/Corded Ware cultural groups. The ultimate nature of the connections between the two has never been fully resolved and seems to be complex, but in this matter also the incidence of rusticated ware in each is of interest.

Beaker rusticated pottery in North West Europe has, to date, been studied in two main categories, not necessarily mutually exclusive: the Pot Beakers of the Netherlands, and the so-called Riesenbecher of the German writers. The application of both terms is limited, although the latter has never been precisely defined and has hitherto been used in a somewhat elastic manner, and no writer has yet attempted any kind of comprehensive survey of Beaker domestic pottery on the continent. As an attempt at such a survey the following must

remain inadequate, since it is concerned above all with rusticated pottery, and it has had to be based largely on secondary sources. It is justified only insofar as it succeeds in clarifying a rather confused subject.

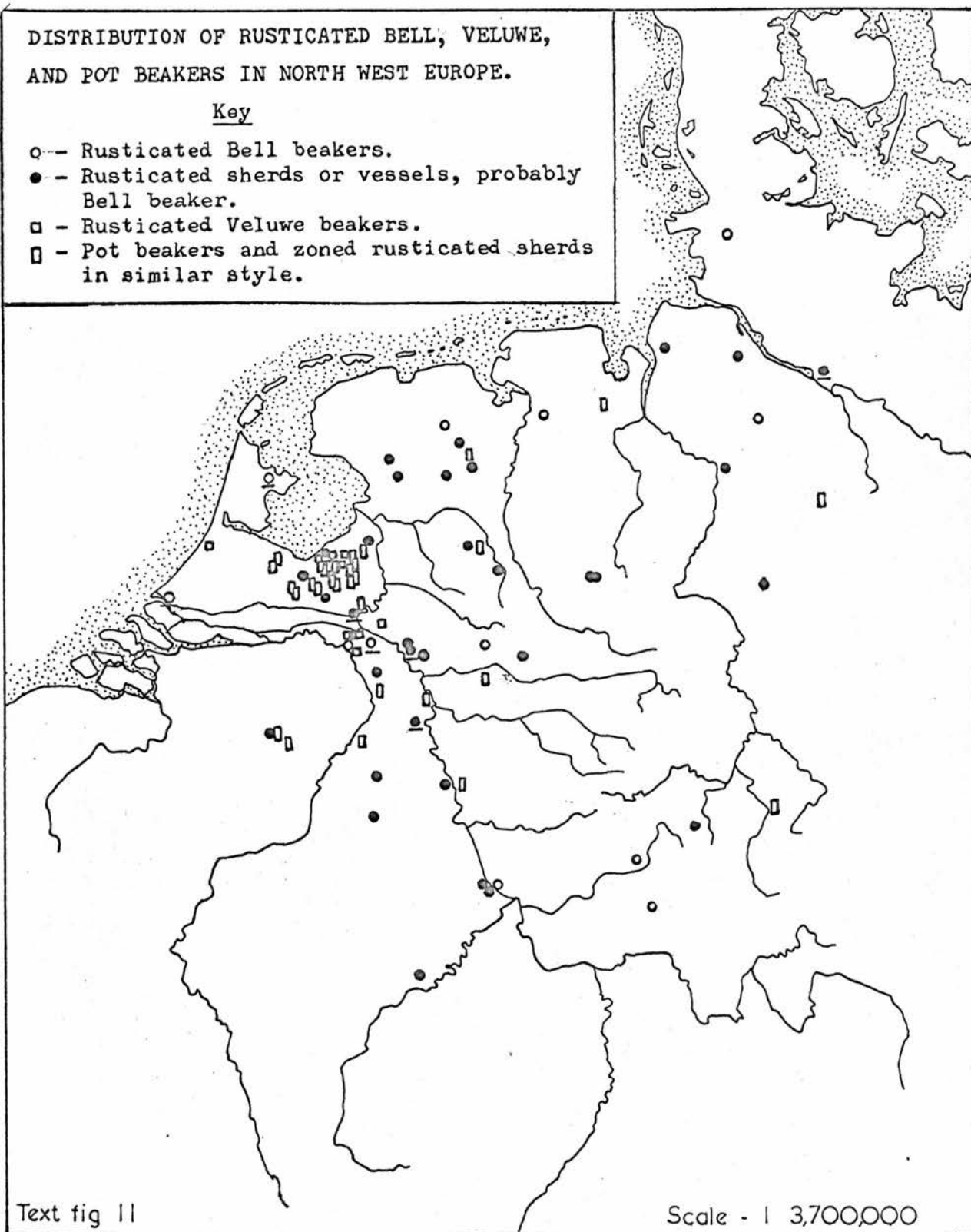
Dutch Pot Beakers

The best known, best documented, and larger of the two categories, and the one most often referred to by British writers seeking comparative material for British rusticated beakers, is that of the Pot Beakers, which are found in the lower Rhine area, and in particular in the Veluwe region in the Netherlands. Most Dutch writers refer to any Beaker rusticated sherds as 'Pot Beaker', but to use the term within its strictest definition, these are large beakers, decorated with plastic rustication in elaborately zoned schemes. They have been discussed most recently by Lehmann, who classifies them according to form and decoration into Trumpet Pot Beakers (TPB), Necked Pot Beakers (NPB), and Belted Pot Beakers (BPB), and establishes with reservations their affinity with Veluwe beakers. (Lehmann 1965; 1967:160) There are enough loosely associated finds and finds stratified in Bell Beaker barrows to confirm the conclusion that they are of the Bell Beaker culture, though the fact that they are more usually found singly, without association, sometimes in Megalithic tombs, and have in their decoration a superficial resemblance to the pottery of the Megalithic tombs has tended to obscure this point in the past.

DISTRIBUTION OF RUSTICATED BELL, VELUWE,
AND POT BEAKERS IN NORTH WEST EUROPE.

Key

- - Rusticated Bell beakers.
- - Rusticated sherds or vessels, probably Bell beaker.
- - Rusticated Veluwe beakers.
- ▣ - Pot beakers and zoned rusticated sherds in similar style.



Text fig 11

Scale - 1 3,700,000

There is an obvious close resemblance between Veluwe beakers and Necked Pot Beakers, which have the same kind of short, upright or slightly flared neck, with a sharp, angular junction between it and the body, and the same kind of zoning with a multiplicity of narrow, horizontal zones on the neck, and a strong emphasis, usually vertical, on the shoulder zone. There are, moreover, a number of Veluwe beakers, nearly all of late appearance, with normal, zoned decoration on neck and shoulder and pinched bumps or ribs on the lower part, as well as a few with all-over zoned rustication in a style closely resembling that of the Necked Pot Beakers: many of these are illustrated by Bursch (Bursch 1933. Abb.74, Taf. II, III, IV).

The Trumpet Pot Beakers might be assumed, on typological grounds, to be earlier. The S profile and the disposition of alternating zones of equal width over the entire surface of the pot recall the European type of Bell Beaker; the one from Hanendorp has, as Lehmann remarks, a resemblance to a PF beaker (Lehmann 1965. 8). One from Ede, however, appears to be stratigraphically later than a Veluwe beaker of type 2^{1e} in a barrow (Lehmann 1965 11). Modderman suggests some kind of relationship between the type and Barbed Wire beakers (Modderman 1955. 41), and the profile certainly has a close resemblance to some of these, and to large vessels of the Single Grave culture with which they form a link.

The function of Pot Beakers as domestic pottery is not usually certain from the circumstances of the finds, though their size suggests that they were designed as storage

containers. Some discovered complete, empty and inverted, could have been ritual deposits: a suggestion made by Lehmann and given weight by a find from Melzendorf-Woxdorf, in Lower Saxony, of a large beaker of the Single Grave culture inverted over a skull (Wegewitz 1960). The connection between Dutch Pot Beakers and the latter find may be remote, but the beaker in question is of the type already referred to in connection with Trumpet Pot Beakers. A vessel not unlike the Dutch Necked Pot Beakers from Bebra, Kr. Rotenburg/Fulda, in Germany, did have traces of blackened incrustation on the inside, which indicates possible domestic use (Uenze 1961 1). Sherds found scattered in burial mounds in the Netherlands recall the similar finds, probably domestic in origin, in Britain, but from only one well documented domestic site, Anlo, do there come any which can reasonably be identified as Pot Beaker according to Lehmann's definition (Waterbolk 1960. Fig. 30:16).

Pot Beakers in the strictest sense are a late manifestation: all indications are that they belong in the latest phase of the Veluwe Beaker culture. It could be said that they are analagous to the larger Long Necked zoned, rusticated beakers in Britain, and indeed, Lehmann has suggested that the same term 'Pot Beaker' should be used for both (Lehmann 1967 65). The two cultures, Veluwe and Long Necked Beaker, developed on either side the North Sea from a common parent culture. The rusticated wares belonging to each constitute the most elaborate and the most numerous known types of all the Beaker rusticated pottery in their respective countries, standing at the tips of

two parallel, branching evolutionary stems, and Pot Beakers and rusticated Veluwe Beakers can be said to stand in roughly the same relation to their British counterparts as do non-rusticated Veluwe beakers to non-rusticated Long Necked beakers (Piggott S. 1963. 90). There are differences in form, of course, and in zone distribution, to the same extent that there are between the two groups of fine ware, and in technique. Otherwise the Dutch Pot Beakers are decorated with vertical and horizontal ribs in similar fashion to British rusticated beakers, although the Dutch examples often seem to be more delicate in execution. One feature which is very commonly used on the Dutch and only rarely on the British beakers is the practice of pinching the surface of the pot into a series of bumps from four sides. The apparently greater variety of forms and decoration met with in British Long Necked rusticated beakers is almost certainly misleading.

Riesenbecher

The term 'Riesenbecher' has chiefly been used by writers discussing large, beaker-like vessels found in North West Germany, and while it is clear from their work that there is a body of large, rusticated beakers in that region which are unlike Dutch Pot Beakers and which have a different cultural background, they have argued that the number of such vessels known is too small to admit a detailed classification or

definitive evaluation (Stegen 1954 270; Struve 1955 132). The distinction between Pot Beakers and other types of rusticated ware in North West Europe has remained blurred. For Stegen, the chief criterion in the definition of a Riesenbecher is form and size, not decoration (Stegen 1954 281), and he lists together various types, with and without decoration including some sherds remarkably like Pot Beakers. Struve implies that the term covers all kinds of large beaker, including the Dutch Pot Beakers and British rusticated beakers (Struve 1955 132). Inevitably this vagueness has caused some confusion in any attempt to discuss origins and affinities. More recently Uenze has used the name 'Riesenbecher' in a similarly generic sense, but under this heading, has distinguished between Pot Beakers (he does not use the term), giant, cordoned, undecorated beakers, giant beakers with 'barbed wire' decoration, and a fourth group decorated with finger nail rustication and not unlike Pot Beakers. Further than that he cannot, and is not prepared to go within the limitations of a short article (Uenze 1961). Most recently of all, Lehmann has underlined the need for a sharper clarification of thought on the whole subject by his emphasis on the strict definition of Pot Beakers and their difference from most of the pots discussed by Stegen and Struve (Lehmann 1965 27).

The word 'Riesenbecher' as used till now has, therefore, so broad an application as to be practically useless in this context. Sub types have been defined, but this has not much

furthered understanding of the subject. Jacob-Friesen used the term 'Bentheim Beaker' to describe one type of large beaker found in North West Germany (Jacob-Friesen 1959). The eponymous find consists of two very large beakers with ovoid bodies, collared rims, narrow bases, and rustication all over, in one case with random 'crow's foot', and in the other with bone-end impressions. Stegen, who confined his study within the geographical limits of Hannover and Oldenburg, defined two basic types of Riesenbecher; Decorated, and Undecorated (Stegen 1954 270). The beakers from Bentheim belong to the former group, obviously, but he prefers not to use that name of other decorated giant beakers. The undecorated, of 'Moislingen' type, which he regards as typologically earlier, consists of large, ovoid beakers with shallow S profiles, high shoulders, narrow bases, and often a cordon below the everted rim. Struve notes further that the types with and without cordons are contemporary, and appear to be distributed mainly in East Hannover. He also points out that the distribution of rusticated giant beakers is limited.

If we dispense, for the moment, with the all-embracing concept of Riesenbecher, and set aside, firstly all non-rusticated vessels in that category, and secondly the Pot Beakers and any sherds which, by reason of their zoned, plastic rustication, may be classed with them, we are left with a somewhat heterogeneous collection of large, rusticated beakers, whose distribution extends from the Elbe in the east to Drenthe and Gelderland in the west, and from Lower Saxony

in the north, to the river Main in the South. The majority of these have a general stylistic similarity, and it is with these, together with the undecorated ones, with and without cordons, that Stegen and Struve were, in fact, chiefly concerned. They ascribed both to the Single Grave culture, an idea which will bear further investigation, particularly with respect to the rusticated group.

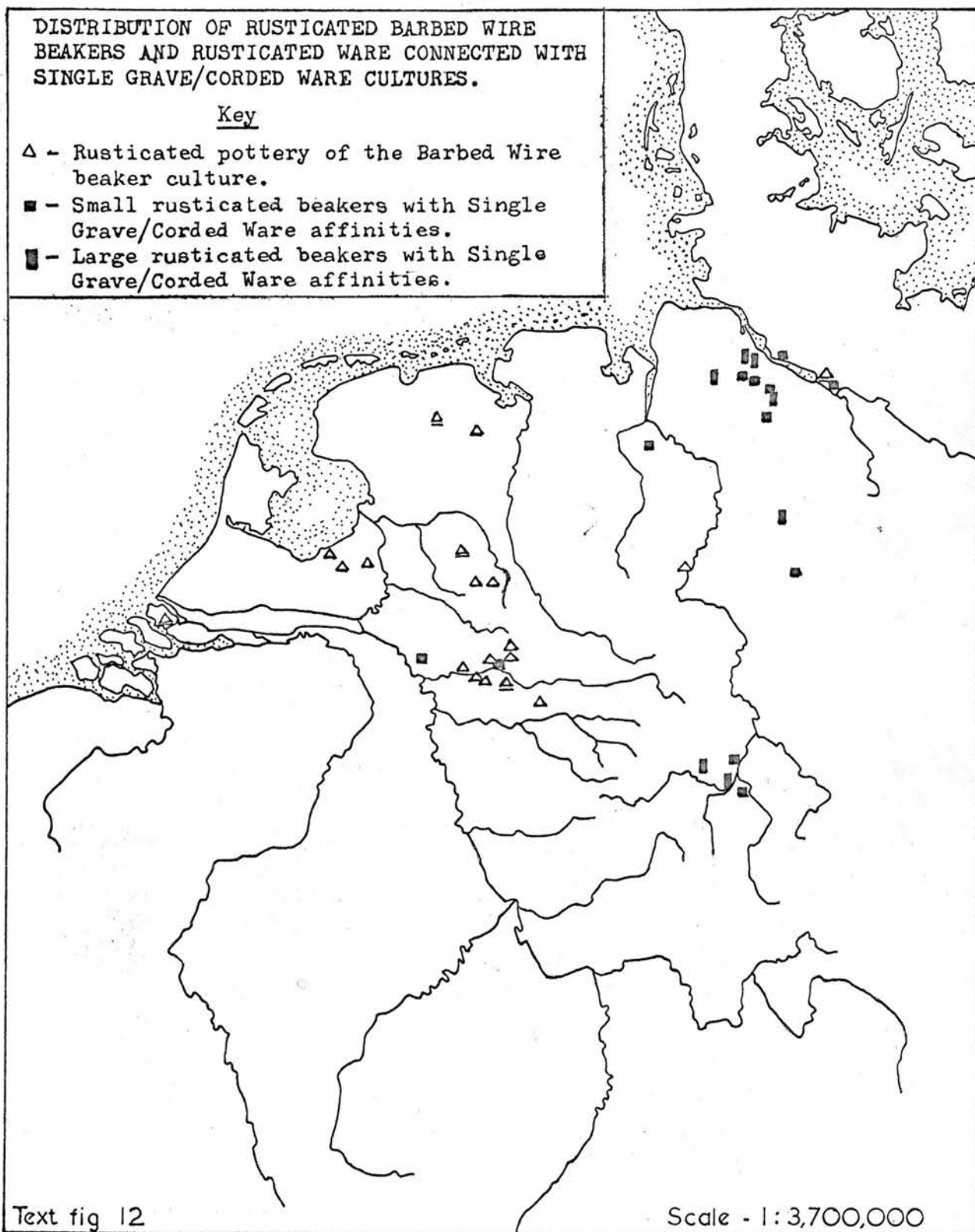
In fact the evidence concerning this is rather inconclusive, demonstrating mainly that these vessels were made in a late neolithic context not specifically or directly connected with the Bell Beaker cultures, and that there are indications that they belong to the Single Grave/Corded Ware complex.

At Altendorf, Kr. Wolfhagen, a large ovoid beaker with high shoulder and rim cordon, decorated with rows of spaced 'crow's foot' impressions over the whole surface was found in a megalithic stone cist grave, together with sherds of cord decorated beaker (Uenze 1961 5), and sherds of large beakers of very similar appearance were found in stone cist graves at Hammah 12, Kr. Stade, and at Zuschen, Kr. Fritzlar Homburg, though not with corded ware. The rim of another large beaker, double cordoned and decorated with vertical lines of pinches came from Site 12, Boburg. This is a domestic site which produced both late Single Grave and Bell Beaker material, and the context of the sherd in question is not clearly stated (Struve 1955 133, Taf. 24:2). More often the finds were isolated, and never have any such been known in single graves apparently. Many of them recall Single Grave beakers in

DISTRIBUTION OF RUSTICATED BARBED WIRE
BEAKERS AND RUSTICATED WARE CONNECTED WITH
SINGLE GRAVE/CORDED WARE CULTURES.

Key

- △ - Rusticated pottery of the Barbed Wire beaker culture.
- - Small rusticated beakers with Single Grave/Corded Ware affinities.
- - Large rusticated beakers with Single Grave/Corded Ware affinities.



certain characteristics of form and in the disposition of the decoration on the pot, and are even closer, typologically, to Barbed Wire beakers in both North West Germany and the Netherlands: Barbed Wire beakers are, in turn, generally held to be closely connected with the late Single Grave/Corded ware as well as with the later Bell Beaker cultures. It may be noted that the rusticated giant beakers in question would not look out of place among the rusticated vessels accompanying the East Anglian and Barbed Wire beakers on the submerged surface on the Essex Coast. From Esperke, Kr. Neustadt, comes a well known giant beaker with sagging, bulbous body, two rim cordons, and a small peg foot. The decoration covers the entire body, a feature not typical of Single Grave/Corded Ware beakers in general, but the foot does constitute a possible morphological link with them. Another find, from Appel-Oldendorf, Kr. Harburg, which was discovered, like some Pot Beakers, inverted in sandy soil, had a narrow foot and decoration on the upper half only (Wegewitz 1960 12f.).

These rusticated giant beakers are considered by Stegen and Struve to be closely related not only to the larger Barbed Wire beakers of North West Germany, but to the undecorated Moislingen type and to large beakers with finger tip impressed or wave moulded rim cordons, on the grounds of similarity of form and fabric and the circumstances in which they were found. The latter types occur in similar contexts to the rusticated ones, especially in megalithic tombs, and in the same region. The beakers with finger tip impressed and wave-moulded cordons

have a much wider distribution, but there is no doubting the Single Grave/Corded Ware connections of all of them (Becker 1955).

It seems fair to conclude, therefore, that there exists a group of large rusticated beakers which can be assigned in a general way to the late Single Grave culture. Whether or not all the rusticated giant beakers which bear a general resemblance to these belong to the group must remain an open question. If the group is to be named after a single find, Altendorf type would seem preferable to the term 'Bentheim', since the latter finds are not the most typical and were without other associations.

Bliedersdorf Beakers

In addition to the giant beakers discussed above, a series of small beakers with rusticated decoration have been assigned to the Single Grave culture. The type was originally defined by Stampfuss (Stampfuss 1929 57), and named after one found deposited in a megalithic tomb and evidently dating from late in the tomb's period of use. It is a small, rather slack profiled vessel, footed, with belly curving gently out above the foot, a cylindrical body and an everted rim, decorated with spaced finger nail impressions on the upper part of the body only. Another similar example was found in a stone cist grave at Deinste, Kr. Stade (Wegewitz 1949. Taf. 73), and Stampfuss describes and illustrates yet others from Haltern,

Kr. Coesfeld, and Urmitz, Kr. Koblenz. Struve discusses the type and illustrates a further example from Brummelhoop, Kr. Oldenburg (Struve 1955 130f.). He links them with a series of small, undecorated beakers of nondescript shape which were found in single graves and megalithic tombs, and which he sees as perhaps an ancestral form.

All the examples mentioned so far possess features in their form and decoration which relate them to Single Grave/Corded Ware beakers; the decoration on the upper half only, the profile, in a general way, and the distinct foot, although the one from Haltern is typical in having widely spaced single rows of finger nail impressions at the rim, round the belly, and round the foot. The term 'Bliedersdorf Beaker', however, seems to have been used of almost any small beaker with simple rustication, including some whose affinities seem rather to be with the Bell Beaker cultures, and thus it is of doubtful value. Struve includes in his list one from Selm which is without a foot and decorated all over with random pinches. (Struve 1955 Taf. 24:8). It looks very like a British Barrel beaker of the Barbed Wire or East Anglian group, as Isobel Smith has noted (Smith I.F. 1955 39) and was found in a grave which cut a double ring ditch containing Barbed Wire sherds, a fact which might support this kinship. Then there are indeterminate beakers such as that from Grauen, which has a pronounced foot and a cylindrical body, but random finger pinches covering the whole surface.

Perhaps the most important fact of all to emerge is that where these rusticated beakers, giant or small, can be linked with the Single Grave culture, they can also be shown to be late in the Single Grave series, and as Struve stresses, well after the Bell Beaker culture was established in the area of their distribution. (Struve 1955 133).

Other Beaker Rusticated Pottery

Pot Beakers, Altendorf beakers and 'Bliedersdorf' beakers with Single Grave culture affinities seem to be types which occur late within their several contexts. Extrapolating from the evidence found in Britain, it is reasonable to expect that rusticated ware and large domestic vessels may form an integral part of other and earlier phases of the Bell Beaker culture, in the Rhineland and the Netherlands at least. Clarke refers briefly to material from the continent, but he does not discuss the matter at any length, and his conclusions do not always seem justified. As regards domestic sites, the situation in the Netherlands and Germany is similar to that in this country, for although a varied assortment of rusticated sherds is known from barrow excavations and stray finds, there are few published sites, and even fewer which have been excavated; over the rest of the continent it seems worse. Yet it is from domestic sites if anywhere that the conclusive evidence will be found concerning the nature of Beaker domestic pottery.

Bell Beaker.

The two earliest well documented sites are in the Netherlands, at Vlaardingen and Oostwoud, and both have produced rusticated sherds, though in very small numbers. At Vlaardingen the well stratified deposit contained Bell Beaker sherds of type 2^{1a} and a sherd of rusticated ware with finger pinches; at Oostwoud the material includes sherds with spaced pinches and one with pinched ribs. It seems to be homogeneous, despite Van Regteren Altena's statement to the contrary (Van Regteren Altena et al. 1961 234), and to date from early in the Bell Beaker series. The series of radiocarbon determinations from Vlaardingen agree on a date of around 1950-1900 B.C. for the site, which is fairly close to the earliest date postulated for the appearance of Bell Beakers in the Netherlands, just before 2000 B.C. Butler and Van der Waals suspect that at both sites there are traces of Central European Beaker influence discernible in the pottery, and that at Oostwoud the sherds seen by Van Regteren Altena as type 2^{1d} may be a stylistic reflection of this (Butler & Van der Waals 1967 46). This would mean, according to Sangmeister's reflux theory, that neither site represents the primary Bell Beaker culture settlement in Western Europe.

In his theses, Clarke cites stray finds of pinched and jabbed rusticated sherds from Belgische Kamp, Appeldoorn, Duesburger and Ederheide, and Wekerom, and some of them, with smooth, concave curved profiles below the rim, and decoration of vertical rows of 'crow's foot' rustication, could be from

Bell beakers of a fairly early type. There seems no justification in identifying them positively as early, however, and Clarke rather weakens his own case by referring back to these same few sherds in connection with other phases of the Bell Beaker culture.

There are two finds from Brittany of Bell beakers and sherds with vertical rows of spaced 'crow's foot' decoration, from the megalithic tombs of Kercado, Carnac and Mane-er-Roh. (Riquet et al. 1963 85, Fig. 10:5,7; 87, Fig. 11:1). Both were with a whole series of Bell beakers of distinctly Breton type, and though the association is not absolutely unquestionable, this suggests that they do not date from the earliest Bell Beaker settlement of Brittany. In Central France another Bell beaker, from Augy, Yonne, decorated all over with circumflex impressions, was associated in a flat grave with an All Over Corded beaker and a European Bell beaker (July 1961). The latter, which is decorated with narrow zone, reserved bar chevrons and a 'calyx' pattern of pendant triangles round the base, may have affinities with those of the Rhineland. Of various unassociated finds in Germany and the Netherlands, the two giant beakers mentioned previously from Bentheim may belong to the Bell Beaker culture, and even to a fairly early phase of it, for they are very like some rusticated European Bell beakers in Britain, particularly one nearly complete, though isolated find from a cairn at Glecknabae, Bute (Callander 1929 Fig. 57).

Middle Rhine Beakers

Among the Beaker cultures which developed subsequently in the Rhine area, Sangmeister's Middle Rhine Phase 2 beakers, mingled with elements of the regional Single Grave/Corded Ware tradition, from the background of the second major Beaker colonisation in Britain, including the Wessex/Middle Rhine and Northern British/North Rhine groups. There are a few rusticated vessels to be associated with the Middle Rhine beakers, and it is interesting that several of these conform to a type, being large and decorated, on the upper part of the vessel only, with spaced impressions of bone ends or similar implements. Decoration confined to the upper part of a beaker is, of course, usually regarded as a characteristic of the Single Grave/Corded Ware cultures, and is significant as such here.

At Friedburg-Fauerbach, in Lower Hesse, a large Bell beaker with a slight cordon below the rim, decorated down to the widest part of the belly with spaced oval impressions, was found in possible association with another large beaker of similar form, decorated over the upper two thirds only with narrow zones of ladder pattern, and a Middle Rhine beaker of fairly early appearance (Sangmeister 1951. Taf.1:1,13,16). There is another large beaker from Schalkholz, Norderdithmarschen, with angular profile and small foot, decorated with bone-end impressions down to the carination, and with three sets of double perforations round the rim. It was found with

a small Bell beaker similar to the Dutch type 2^{1c}. (Struve 1955. Taf.21:10,11). Clarke mentions another, similar association of a bone impressed beaker, decorated on the upper half only, with a beaker related to the British Wessex/Middle Rhine type from Helversiek, Kr. Rotenburg. He also mentions closed find associations of finger nail decorated beakers and early Middle Rhine beakers from Niederbieber and Neuwied, and an unassociated find, attributed on typological grounds to the same group, from Weissenturm, near Koblenz.

Veluwe and Other Late Beakers

The rusticated pottery of the later phases of the Veluwe Beaker culture in the Netherlands has already been discussed under the heading of Pot Beakers, but there is little comparable material to connect with the earlier phases of the series and, in particular, with the beakers intermediate between the European and Veluwe types (Types 2^{1b} and 2^{1c}) which are important to the development of British Short Necked beakers. Clarke cites rim sherds from the Duesberger and Ederheide which have horizontal pinched rib decoration as belonging to a proto-Veluwe type, but his reconstruction of the profile looks questionable, and they could be perfectly consistent with early Veluwe type beakers: there is only typological evidence to judge them by. A large beaker from Winnekendonk, Kr. Geldern, near the Dutch border, has an angular profile, flared neck, and zoned, ribbed decoration

disposed in a manner basically similar to that of the Necked Pot Beakers, though more simplified, and looks typologically early in relation to the Pot Beaker series. It was found near a beaker similar to Clarke's Primary Northern British/Dutch type, and Clarke seems to take this as a direct association. If this were so, the pot would presumably be itself a proto-Veluwe type.

Other pot beakers from Speulde (Lehmann 1964), and the Driese Berg, Drie (Lehmann 1967 b) may be intermediate between it and the latest Necked Pot Beakers. A large beaker which does appear to belong to the Pot Beaker series, from the Leusderheide, might belong to a phase of the Bell Beaker culture prior to the Veluwe beakers. It was found unaccompanied and inverted, like some of the Pot Beakers, and it has a wide-mouthed, Bell beaker-like profile, with horizontal, smooth ribs on the neck, and the body covered in vertical rows of spaced 'crow's foot' impressions. Spatula impressed herringbone decoration in a band round the rim, and spatula impressed decoration on the shoulder constitutes a possible typological link with the PF beakers. (Modderman 1955 40, Fig. 7).

Large beakers and sherds with zoned, plastic rustication are not confined in distribution to the Netherlands, but while these are not necessarily identical with the Dutch Pot Beakers, they are not necessarily earlier, either: most are obviously as developed, typologically, as the Dutch vessels. Sherds of

zoned and ribbed beaker, most of which could have come from Pot Beaker-like vessels, have been found as far apart as Dringenburg, Kr. Ammerland, (Stegen 1954. 273, Taf.36) and Leverkusen-Schlebusch, near Cologne, (Kersten 1938 71, Taf. 12:1-6). The type of decoration suggests the Necked Pot Beaker, though one sherd from Leverkusen has a concave curved profile. Such finds are, as Kersten remarked (Kersten 1938. 74), sporadic in the Rhineland, and mostly correspond to a scatter of Veluwe beakers up the middle Rhine. South of the main concentration of Pot Beakers in the Netherlands there is a Trumpet Pot Beaker from Wijerkense Berger, Lommel, in Belgian Limburg, differing from the known Dutch examples only in its exaggeratedly curvilinear profile. (Marien 1952. Fig. 134:7) Well to the east of the Rhine there is a single find from Bebra, Kr. Rotenburg; a large vessel which looks very like a Dutch Necked Pot Beaker, though the widely spaced vertical ribs on the lower body are eccentric (Uenze 1961 1 Taf.1). To the south there are sherds from Preist, Kr. Bitburg, of a large beaker decorated on the neck with horizontal ribs, with rows of oblique finger nail impressions between the ribs. The body seems to have been sparsely decorated, and the vessel as a whole does not fit into any of the existing categories of Pot Beaker. (Trierer Zeitschrift XIV 1939 199, Abb.2), but there are sherds of an almost identical vessel from a hunebed at Exloo, (Van Giffen 1927. 220, 225; Text Fig. 9:25).

Barbed Wire Beakers

The Barbed Wire Beaker culture constitutes a problem perhaps less well understood than the Bell Beaker cultures as a whole, although on the continent its domestic sites are rather better documented than most. The date suggested for Barbed Wire pottery everywhere is generally late, and the cultural background a mixture of Single Grave/Corded Ware and Bell Beaker elements. According to Clarke, the British Barbed Wire Beaker assemblages are closest to those of the southern Netherlands and the Lower Rhineland (Clarke 1967), although the technique is, as we have already remarked, found also on pottery in North Germany.

The techniques of rustication found on Barbed Wire Beaker pottery on the continent are mostly of the simpler type, such as 'Crow's foot' pinching, finger tip or other spaced impressions, and horizontal pinched ribs. There are small collections of sherds from several probable domestic sites in the region of Recklinghausen, near the Dutch/German border, which consist of or include Barbed Wire beakers and rusticated ware as well as some sherds on which 'barbed wire' and finger tip impressed decoration are combined. Among Barbed Wire Beaker sherds from a domestic site excavated at Datteln are several from at least three vessels decorated with horizontal pinched ribs, in the style common with East Anglian Beaker pottery in England (Bell & Hoffman 1940 Taf.18,19) but, judging by groups of sherds found on other sites such as Haltern and Herten South,

finger tip impression was probably the more common style of rustication in use within the culture (Stampfuss 1940, Abb.6). None of these collections is very large, and in some of them the associations are not a matter of absolute certainty, so it is difficult to be sure on this point.

Another domestic site at Schipborg, near Anlo, produced Barbed Wire Beaker sherds and a few Bell Beaker sherds of a fairly early type. The only rusticated ware consisted of a few sherds of finger nail and finger tip impressed pottery and a large beaker with ovoid body, short, narrow, straight neck, and a rim cordon, decorated all over with small, cuneiform impressions. It is described in the report as a 'Pot Beaker' of degenerate type, but in fact, judging by its appearance alone, could even be domestic early Bell Beaker, (Vander Waals 1962 239; Fig. 26). The site also produced TRB sherds. There is a radiocarbon date, based on a sample from a Barbed Wire Beaker pit, of 1820 ± 65 B.C. (GRN 2445), which is very early for the Barbed Wire Beaker series but comparable to Lion Point Site 114, Clacton, for which there is a similar date of 1800 ± 150 B.C. (BM 172).

In the Netherlands there is a series of radiocarbon dates ranging from 1670 ± 65 B.C. (GRN 852) to 1395 ± 180 B.C. (GRO 1997) for Barbed Wire beakers from the site at Anlo which attests the long survival of the culture. Among a number of Dutch Barbed Wire beakers whose decoration incorporates 'barbed wire' and finger nail impressions or finger pinches, most look degenerate and late. (Bursch 1933. Taf.III:9; Modderman 1955 37. Fig.4: 5,6).

As has been mentioned already, a number of 'barbed wire' decorated beakers of North West Germany are similar in size and form to the Moislingen and Altendorf types of giant beaker. This similarity does not necessarily imply more than a very general relationship, though it is possible that there is a closer connection.

ORIGINS OF THE TECHNIQUE OF RUSTICATION IN THE BEAKER
CULTURES

Despite the shortage of available information, there is enough evidence to show that rusticated vessels, some of them very large, are a feature of Bell Beaker cultures on the continent from a fairly early, if not the earliest phase. That the survey above is confined chiefly to the those regional groups of Bell Beakers which have direct connections with those in Britain, namely; European, All Over Corded, Middle Rhine, Barbed Wire and Necked, is not an oversight. The known distribution of rusticated Beaker ware of all types is confined to North West Germany west of the Elbe, the lower and middle Rhine, Central and Western France, and possibly Spain.

There seems to be no trace of rusticated ware among the Bell Beakers of Central Europe, despite the fact that they have been studied fairly extensively. Not many domestic sites of this culture are known here, either, but neither on one comprising five pits at Naheremmingen, Nordlingen, in Bavaria, (Frickhanger 1937), for example, nor in a pit at Streckau, Kr. Weissenfels, Saxony, (Neumann 1929), were there sherds of anything but the ordinary Bell Beaker types of the region and undecorated vessels.

It now remains to be seen how and where, in this context, the technique of rustication originated and developed. For the purposes of this investigation the discussion is concerned

mainly with all kinds of finger nail impressed and finger pinched rustication as the most common and characteristic on Beaker pottery.

It was once usual to regard the technique as originally alien to and entirely late in the Bell Beaker cultures, and to look outside the latter for the source of this decorative style and of large beakers generally to the pottery of late-surviving mesolithic or sub-mesolithic traditions such as Pit Comb Ware. (Kersten 1928; Stegen 1954. 281-283; Struve 1955. 133f). Kersten's theory of a westward movement of the Eurasian Pit Comb culture has long been discredited. There are no known-settlements of such a culture in the Netherlands or North West Germany at any time (Lehmann 1965 27). Moreover, there is very little real similarity between the finger pinched and finger nail decoration of Beaker rusticated ware and the pitted and impressed decoration of Pit-Comb pottery. There is one sherd with finger pinched decoration, cited by Kersten, from Cadobec, in Siberia (Ebert Reallexikon XII Taf.7n); but this, though it does resemble a style of rustication characteristic of Bell Beaker pottery, is by all accounts a very rare type in this context, and too far removed geographically from the Bell Beaker cultures to signify necessarily any direct connection. If the principles of pitting and impressed decoration are considered alone, they are so widespread in the neolithic cultures of Europe that there is no need at all to assume a direct link between any two cultures employing them.

Since rusticated Beaker pottery does not seem to be a part of all Bell Beaker cultures it is unlikely that it was developed at their hypothetical single point of origin, wherever that is considered to be. It is not found in Central Europe, and an origin in Iberia can probably be discounted also. As an alternative, Clarke considers that the 'corded ware' element in the All Over Corded Beakers is not of the Single Grave/Corded ware complex, but that it is part of the earliest European Bell beaker complex, and that it originated in and was diffused from the Gulf of Lyons area, against a general background of Impressed Ware. Even if we were to accept this, there is little to suggest that the Beaker styles of rustication also had their origin in either France or Iberia. Simple finger nail impression is a technique found on some Mediterranean Impressed ware, but this is not particularly like Beaker rustication. Furthermore, there is no sign that rusticated ware was a usual part of the earliest Bell Beaker culture here. Hardly any rusticated Beaker pottery has been found in Spain or Portugal. What there is appears to be of simple type but in a late context (Castillo 1928 P1XXV). A beaker referred to by Lehmann, from San Isidro, near Madrid, is late in form and decorated in a false relief style which resembles a Pot Beaker more superficially than actually. (Ebert Reallexikon IV:2 Taf.47g) In France, the sherds already mentioned from Brittany, plus another from Crugen, Plovan, Finisterre (Castillo 1928 P1CIV:7), seem to be alone. The writers of the only general survey of French

beakers stress that these were the only examples of the type they came across (Riquet et al. 1963). The impressed beaker from Augy seemed, as has already been stated, to have affinities with Saugmeister's Phase I of the Middle Rhine Beakers.

It does seem, however, as if the Beaker style of rustication was brought into France on a rather larger scale than is immediately apparent, presumably by cultures coming from the Rhine. At Roucadour the late neolithic pottery of occupation layer A1 is mostly decorated in various styles of finger pinched rustication, and many might be mistaken for Beaker domestic sherds in another context. In the report it is thought rather that they relate to the Michelsberg culture, but the basis for this idea seems slight. (Niederlender et al. 1966. Pl. IX, Fig. 25) In date the deposit is almost certainly not earlier than the Bell Beaker cultures.

It looks, in fact, as if Beaker rusticated pottery originated in the areas where it is found most commonly, and if so it must either have arisen there spontaneously within one of the Beaker cultures, or been copied from some neolithic culture already established within the region.

Rusticated ware does not seem to be an original part of any Corded Ware/Single Grave culture independently of the Bell Beaker culture. When considering the relevant pottery associated with the Single Grave/Corded Ware complex it is important to distinguish clearly between rusticated giant beakers and the undecorated type, even while recognizing the probable relationship of some of the forms. A cursory look at

the European Corded Ware/Battle Axe complex as a whole shows that large pots of a type comparable to the undecorated Moislungen giant beakers are wide-spread within it and are found, for instance, among pottery from domestic sites in Switzerland which Struve likens to Single Grave ware (Struve 1955 103f), and in the Oder/Elbe and Central European Corded Ware cultures (Becker 1955). Moreover, such vessels are common in many late neolithic contexts in Europe other than Beaker, including Michelsberg and Altheim, and have a long history there. Finger tip impressed decoration is found on many of all these, usually round the rim or on a raised cordon, but occasionally used sparingly in the decoration of amphorae. The rusticated Altendorf beakers, on the other hand, are found not only comparatively rarely, but within a general Corded Ware/Single Grave context in North West and Western Europe only. The distribution of such finds is limited to an area where an overlap and mixing between the Bell Beaker and Corded Ware cultures is known to have taken place and to contexts which indicate that they are late in date relative to the Single Grave culture settlement of the area.

This leaves the possibilities that the technique of rustication was either adopted by or developed in the early Bell Beaker cultures of the middle or lower Rhine region or of Britain. The makers of Corded and Bell beakers were certainly eclectic; a fact which has very much complicated the problem of deciding where and how these cultures originated, and in

what relationship they stand to one another subsequently. In the middle Rhine region finger tip and finger pinched decoration occurs on the pottery of other neolithic cultures, though none can with certainty be pointed out as a source from which the Beaker cultures could have taken the idea. In some, the process may have been the reverse.

In the Michelsberg culture pottery is sometimes decorated with finger tip impressions, though usually sparingly. In the middle Rhine area itself there is a single example, from Urmitz, of a round based, beaker-like form with five rows of finger tip impressed, plastic ornament covering the neck (Scollar 1959 Fig.2:24): the form of the pot is said to have parallels in the Chassey culture. The style of decoration is not like that of the earliest known rusticated Bell Beakers, but it does resemble that on a beaker of Westdeutschebecher affinities from Altenbauna, Kr. Kassel-Land. (Sangmeister 1951 Taf.XXI:10) Further south, from Buttelhorn, Darmstadt, there is a vessel similar to that from Urmitz, although with a shorter neck. (Scollar 1959 Fig. 3B:18). As for the possibility of an overlap and contact between the Michelsberg and Beaker cultures in the region, at Urmitz itself the ditches of the later phase of the Michelsberg culture settlement contained Bell Beaker and Corded Ware low in the fill.

In the north, at Boburg Sites 12 and 15, there are assemblages of TRB pottery which include funnel necked beakers or jars, amphora-like vessels, and collared flasks, many of them with non-plastic finger tip impressed and jabbed decoration

covering most of the upper half or two thirds of the surface (Schindler 1953 Taf.IX, XII, XIII). It is not certain how extensively this kind of rustication was used on TRB pottery, or how early. Very few domestic sites of this later period are known, and the pottery found in the northern gallery graves, which must be roughly contemporary, bears a different style and technique of ornament. With the Boburg pottery were found a few sherds decorated with comb and cord impressed ornament. Some of the vessels recall those of the Single Grave/Corded Ware tradition in a general way, and related, though more degenerate looking pottery came from the nearby cemetery at Sande, where Corded Ware Beakers were also found. It will be noted that no 'crow's foot' ornament of the characteristic early Bell Beaker type is known among this group, either.

Plastic finger pinched decoration, a technique very like that found on pottery of the later Beaker cultures, was used much earlier on Linear Pottery. At the cemetery at Sondershausen, Thuringia, a hemispherical lugged bowl, covered with heavily plastic random finger pinching was found (Kahlke 1954 54, Taf.266). This is dated fairly early in the Linear Pottery culture, and finds of similarly rusticated sherds in early contexts are reported in Central Germany, Bohemia and Poland, but are certainly rare. Finger pinched and finger tip impressed rustication are also known on late Linear Pottery (Phase IV) in Saxony (Hoffman 1963), the Netherlands, (Modderman & Waterbolk 1958, 1959), and the Paris Basin (Bailloud 1964 30f. Fig. 7), though here the pinches are flattish and arranged

in single horizontal and oblique rows on the rim and upper half of the bowls. It is not seriously proposed that there is a direct connection between these and Beaker rusticated ware, though Sangmeister does suggest that there might be a late survival of Phase IV of the Linear Pottery culture in Western Europe, and refers to a possible association of Bell Beaker of his Middle Rhine Phase 2 and Late Linear pottery at Geleen (Bursch 1937; Sangmeister 1951 72).

None of this can prove direct cultural connections, though the possibility of these is not ruled out. It could equally demonstrate the likelihood of an independent development of such techniques within several different cultures, as seems to have happened again, long after the Beaker cultures. Where pots are made by hand, decoration with the fingers and finger nails is an obvious technique, especially on coarse pottery. Certainly, the simplest forms of finger nail and finger tip impressed decoration occur very widely.

Another possibility is that rustication of Beaker pottery originated in Britain. This seems unlikely in the face of all the known facts, although there is no reason, in principle, why traffic across the North Sea should not have been two way. The available evidence favours the first appearance of rustication on Beaker pottery on the continent. Simple 'crow's foot' rustication occurs on European and All Over Corded Beaker pottery in the Netherlands, and these groups came to Britain from the Netherlands. The Vlaardingen site, which produced a rusticated sherd among European Beaker material, is dated

c.1950 B.C., while in Britain the earliest date for a European or All Over Corded Beaker is that from Antofts Windypit of 1800 ± 150 B.C. (BM 62). The estimated date for entry of the All Over Corded Ware culture into Britain is between 2000 - 1900 B.C., but there is no way at present of checking whether the rusticated ware such as is found on the European/All Over Corded Beaker domestic sites in this country appears similarly early.

Most of the late neolithic cultures in Britain include pottery decorated in styles of rustication similar to those found on Beakers, and these are the only possible source of the style in Britain outside of the Beaker cultures themselves. But even when the decoration of Peterborough and Grooved Wares was seen as evidence of contact between neolithic cultures and a sub-mesolithic continuum, people tended to reserve judgement on the question of whether or not the technique was adopted from these late neolithic cultures by the Bell Beaker immigrants (Piggott S. 1954 341), mainly because of the obvious affinities of some Long Necked Rusticated with the Dutch Pot B Beakers. Grimes thought that this was an instance of parallel, or convergent development, and that the same North European tradition had influenced both independently (Grimes 1960 196).

Mortlake, Fengate and Grooved Ware have now been shown to be largely contemporary with the Beaker cultures in Britain, and Isobel Smith and Piggott both point out that the features common to both series are more likely to derive from the Beaker

cultures than vice versa (Smith I.F. 1956; Piggott S. 1962 77). Clarke follows this to an extreme conclusion, and would trace all decoration of any kind on British late neolithic pottery to the influence of the Beaker culture. There is indeed little in the 'Western' neolithic background of the British late neolithic cultures to account for the flat bases of Fengate and Grooved Ware vessels, or zig-zag motifs, or the large scale use of cord impressed decoration, or, for that matter, pinched decoration. Simple finger nail and finger tip impressed decoration is, however, sometimes found on Ebbsfleet ware, and while Ebbsfleet ware does seem to overlap chronologically with the earlier Beaker cultures, it was almost certainly in use before their arrival. Similar non-plastic rustication is found also on some Grooved Ware sherds which seem to date from before the first appearance of Bell Beakers in this country (Inf. Isla McInnes). It may be a difficult point to prove, in the absence of precisely dated finds, and there is nothing to say that the more complex rusticated decoration on the later neolithic or Beaker pottery derives in any way from this source. On the other hand, forms of rustication may antedate the arrival of the Beaker cultures in this country, and may be noted alongside the similar instances of simple rustication in pre-Beaker neolithic cultures on the continent.

The question of the ultimate origin of Beaker rustication remains largely unresolved, though on balance the evidence favours a background of late neolithic/Corded Ware/Bell Beaker

contact in the region of the lower and middle Rhine. There still remains the whole matter of the subsequent typological development of rusticated Beaker pottery, and of the inter-relationships of the Beaker cultures in Britain and on the continent insofar as they affected this.

It is usual to see the British Beaker cultures as the product of an entirely one-way traffic from the continent. Clarke does so, and includes all the major innovations in British rusticated ware. Certainly the main population movement was in this direction, but there is, as has been stated, no reason to suppose that features of the Beaker cultures which developed in Britain, including pottery styles, could not have been fed back and assimilated into Continental Beaker cultures as a result of contact maintained between the two.

The question arises in respect of the development of rusticated beakers because the quantity and variety of such pottery known in Britain is relatively greater than that known on the continent, it is easier to trace the outline of its typological development in Britain and to see certain features of the rusticated pottery in the Beaker cultures of the Continent in relation to the British series rather than in relation to a self standing internal series there, and rusticated beakers on the Continent are known chiefly in the regional Beaker cultures with which those in Britain have most affinity. All this may well be as the result of chance factors, but the point is worth considering, if only as an academic one.

Rustication, chiefly of the 'crow's foot' type is not common among the earlier types of Beaker pottery, either in Britain or on the Continent. Possibly more examples are known in Britain because here they were sometimes placed with burials, whereas on the continent, this was a very rare custom. The problem concerns rather the development of plastic and zoned rustication.

Rusticated Long Necked and Veluwe Pot beakers are obviously related to each other, and the arrangement of the decoration on them into zones is related to the zoning of fine ware beakers. The idea evidently took hold only when the process of 'zone contraction' on fine ware beakers was well advanced, relatively late in the Bell Beaker series. The techniques used include plastic pinching and pinched ribbing, and it is the background and development of these which is of particular interest here.

On the known rusticated pots of the European and All Over Corded Beaker cultures, most of which are from Britain, 'crow's foot' rustication is nearly always disposed either randomly or in vertical rows, despite the horizontal emphasis in the decoration of the fine ware. Vertical rows of such paired finger nail impressions are found on a good many Bell Beakers of rather slack profile, and this arrangement continued in use on British Necked beakers also. On one such, from Snailwell, Cambridgeshire, the flattish finger pinches are so closely spaced as to look almost like ribs. This was apparently found with a Short Necked beaker, though it is not

clear whether the association was direct or not. (Inf. C.A.M.). Among the few rusticated beakers of the Wessex/Middle Rhine group in Britain some which have a kind of 'false cord' or horizontal ribbed decoration have been described, as at Fakenham and Stanton Harcourt. These motifs could either be a spontaneous development within the culture, or equally possibly, have been adopted late by the Wessex/Middle Rhine group as a result of contact with other, more developed groups. In the corresponding culture of the Middle Rhine there do not seem to be any related vessels with such decoration, with the possible exception of one from Weissenturm, Kr. Koblenz, described by Grimes as having flat 'ribbed' decoration (Grimes 1960 196) and attributed to this group by Clarke on the grounds of form.

The first consistent use of horizontal ribbed beakers in Britain is in the East Anglian group, although the style may also have been in use in the Barbed Wire Beaker culture at an early date, judging by the one sherd from Lion Point Site 114. On the Continent, in the Barbed Wire Beaker culture, a similar style of ribbed rustication was in use, as we have seen, but not necessarily in the earliest phase of that culture. Most of the published find groups, including those which seem to be earliest, are admittedly small, but include no ribbed beaker. Sangmeister illustrates one apparently early beaker from Staatsford-Melzungen, found in a barrow with two 'fischgratenbecher', which has a profile approximately like a British Barrel beaker

and is decorated all over with horizontal rows of alternating oblique incisions, possibly done with a finger nail, which look more like some 'false cord' than herringbone decoration. (Sangmeister 1951 Taf.XII:12).

There is then a gap between this stage of typological development and the zoned rustication of the Long Necked Beakers of Britain and of the late Veluwe and Pot Beakers of the Netherlands, a gap which is most logically filled by the hypothesis that zoned rustication developed first in the pre-Veluwe beakers of the Netherlands and was transmitted to Britain with the Primary Northern British/Dutch group, or Dutch type 2^{1c}. beakers. The middle Rhine area can probably be discounted as a source, anyway, because zoned rusticated beakers here seem usually, if not always, to be offshoots of the Dutch Veluwe type. In the Netherlands, as we have seen, zoned rustication may occur on early Veluwe Beaker pottery, and a rough typological background for the Pot Beakers may be discerned, but it is not known for certain on beakers ancestral to both the Veluwe and the British Short Necked and Long Necked beakers. One example, from Nijmegen, which Clarke gives as an example of such could well, in fact, be degenerate. It has a bulbous, nondescript profile, horizontal ribs on the neck, and rows of pinches on the body (Clarke 1964). Another, from Hazekampje, near Nijmegen, even looks to have British affinities. It is like an early Veluwe Beaker in profile, except that it has a long neck, and the decoration consists of vertical ribs covering the neck, and horizontal, flattish pinched ribs bordering the neck

zone and on the lower body with a narrow undecorated zone at the junction of the neck and body. The form and the disposition of the zones, with the vertical emphasis on the neck, look to have more in common with Long Necked beakers than with any proto-Veluwe or early Veluwe type.

In Britain, the absence of known zoned rusticated vessels among the Short Necked beakers may or may not be significant in relation to this theory. The Long Necked Beaker culture is considered by Clarke to have developed as a result of contact between his Developed Northern, Wessex/Middle Rhine, and possibly European Bell Beaker cultures. If Short Necked beakers are not known to have zoned rustication, neither are the others. Only Wessex/Middle Rhine beakers are thought for certain to have had any form of true ribbed, or even plastic decoration, and then possibly only as a result of such late contacts as this. It has been observed, however, that a very few European Bell and perhaps Wessex/Middle Rhine rusticated beakers do embody some idea of zoning with a break at the shoulder in the otherwise all-over scheme of decoration.

If plastic zoned rustication developed within the Long Necked Beaker culture, the process must have been very rapid. Not much is known of this aspect of Primary Southern pottery, but in the Developed Southern group, zoned rustication was already widely used, as can be seen in the assemblage from Chippenham V. A beaker from East Tuddenham, Norfolk, might be an intermediate form in such a development. It is probably a Long Necked beaker, and Clarke tentatively identifies it as an

early form in this group, but its profile is such that it has sometimes been referred to as a Bell Beaker. Its decoration, of horizontal ribs all over, is closer to the East Anglian Beaker style of rustication than to any other known Long Necked Beaker, and it was found in a sandpit with a Short Necked beaker. According to the original record of the find in the Norwich Castle Museum, this may have been a direct association, but there is some doubt as to the accuracy of the observation.

If there were any innovations, such as zoning, in Beaker styles of rustication in Britain, of importance in relation to those on the Continent, it is possible that the individual and independent development of style among the contemporary British late neolithic cultures may have played some part. In Mortlake ware the most usual techniques of rustication involve a plastic treatment of the surface, including pitting with the finger tips, which is not particularly Beaker-like, or impression with the end of a small bone, or plastic finger pinching, which are, or occasionally, horizontal ribbing, as from Heath Row, Pit II (Grimes 1960 Fig. 77:11,12). Zoning of decoration on Mortlake vessels is an idea which almost certainly derives from Beaker pottery, but zoning of rusticated decoration on them is not usual. An exception is an unusual pot from Lion Point, Clacton (Smith I.F. 1956 Fig.39) which has non-plastic finger nail impressed rustication and recalls an unusual, large beaker from Hallsford (Fig. 45). The latter is probably Long Necked, although the form is uncharacteristic,

and there were no associated finds.

The style of rustication on Fengate pottery is generally non-plastic and quite unlike any usual Beaker rustication, but sherds from the eponymous site have spaced pinches and vertical pinched ribs. Grooved Ware rustication is usually heavily plastic, and includes finger pinched and impressed techniques, as well as a type of applied and finger moulded decoration which is similar in effect, but which seems to be a variation found in this culture alone (Cunnington 1929 P1.27:7,8; P1.29). A form of zoning, in combination with grooved decoration, is found here also.

All of the late neolithic rusticated pottery mentioned so far was found in the south of England, and distribution is usually extremely localised. In the north, in Scotland, plastic, spaced pinched rustication is found on late neolithic sherds, as at Brackmont Mill, Fife (Longworth et. al. 1967 P.1V:20; Fig.4), or Kenny's Cairn, Caithness (Callander 1929. Fig.4; Henshall 1963 254) in contexts which do not preclude the possibility of contact with the Beaker cultures. One of the sherds from Brackmont appears to have squared, pinched bumps in the Veluwe manner, but there is no zoned rustication.

Comparative chronology is, of course, important in this discussion. There are dates for Veluwe beakers ranging from 1902 ± 180 B.C. (GRN 326) for two beakers from Bennekom, to a terminus ante quem of 1755 ± 80 B.C. (GRN 2996) from St. Walrick, Gelderland. The former date is quite possibly too early, considering the conventional chronology of the Beaker cultures

and the rather wide standard deviation of this particular determination. In Britain, Clarke estimates a date of 1650 B.C. for the beginning of his Southern Beaker development, and would have the Short Necked Beakers appearing not before 1700 B.C. This would obviously make nonsense of any suggestion that any development within the British Necked Beaker cultures could have affected in any way the Veluwe Beaker cultures in the Netherlands. Clarke quotes the date for the Cottage Field site, from which the pottery is very late-looking, of 1560 ± 150 B.C. (BM 77). This is thought to represent a minimum value (B.M.Q. XIII 1961 120). Such a chronology would allow not much more than a hundred years for the whole Long Necked Beaker series, and would leave something of a gap between these and the early phases of Short Necked beakers which preceded Long Necked Beakers typologically, and which must have been contemporary with the early development of Veluwe beakers, if both are derived directly from the Dutch types 2^{1b-c}. There are, moreover, two dates, both of 1850 ± 150 B.C. (BM 152; BM 133) from Chippenham V and Fifty Farm, both sites being of the middle period of Long Necked beaker development. These dates are probably too early, despite their agreement, but Long Necked beakers could appear as early as 1800 B.C. without creating any alarming inconsistencies within Beaker chronology. Short Necked beakers could perhaps begin by 1850 B.C., which would bring everything more into line with the Dutch dates. Clarke has the earliest Wessex/Middle Rhine beakers arriving around 1750-1700 B.C., a date which depends on the date of the Middle Rhine beakers which are ancestral to them, and ultimately

on the date of Adlerburg-Straubing; and Long Necked beakers cannot appear earlier than Wessex/Middle Rhine beakers. The beginning of Adlerburg-Straubing may, however, be as early as 1900-1800 B.C. (Butler & Van der Waals 1967 55), which would in part at least, resolve this difficulty.

It begins to look as if the immigrant groups bringing the Beaker cultures to Britain could all have arrived in fairly rapid succession between c.2000 and 1850 B.C., with the Barbed Wire beakers perhaps a little later, and that specifically British Beaker groups have a long and extensively overlapping development, as did their counterparts on the Continent on the fringes of the growing bronze-trading empires of Central Europe. Typologically, the earliest European, All Over Corded, Wessex/Middle Rhine and Primary Northern British/Dutch beakers could be the product of a fairly short period of development on the Continent, and there is no reason to think that there was a significant lapse of time between the development of a type on the Continent and its first appearance in Britain.

It is clear that there is not yet enough data to justify more than an outline for a consistent scheme for the various kinds of rustication, placed culturally and chronologically as far as possible. Thus, distinctive types of rusticated ware, in differing proportions to the fine and undecorated wares, can be seen to relate to different phases and groups of the Western Bell Beaker culture, ranging from the few, simplest, European Bell Beaker types to the relatively numerous and elaborate late

types. While our knowledge of, for instance, the Short Necked Beaker culture is so imperfect it is as well not to be dogmatic in drawing conclusions, and the question of the origins of these styles of rustication, and in particular of the more elaborate ones, must remain open. This investigation has shown rather the complexity of the subject, touching on the whole question of interrelationships among the various branches of the Beaker cultures, and it has pointed out various possible approaches to it.